

THE TIMES
Tomorrow

Looking ahead
Part Two of Norman Macrae's vision of the future

For and against
Why the Tories should foster the Alliance as a strong Opposition

State of the unions
How biased is the media against trade unions?
On the ball

England's manager
Bobby Robson announces the new season's football squad

Portfolio**Three share £60,000**

There were three timely winners of the £60,000 Portfolio divided on Saturday. Each said he or she had a particular need for a share in the dividend, which had accumulated after two weeks of non-winners.

Mr John Langford, of Old Canteen, Doncaster, is 48 today so the money will be a birthday present; Ms Carmen Irizarry, aged 44, of Muswell Hill, London has been on the dole for 23 months; and the third winner, Mrs Louise Leigh, a portrait artist, aged 55, of Bushy, Herts, will use her money to help her two children who have just finished full-time education.

For Ms Irizarry, the £20,000 share was a particular joy. As an editor and translator of Spanish, she needed some capital to pay for a trip to the Frankfurt Book Fair, where she hopes to get work. "Buying The Times every day has been my one luxury during unemployment. I have had to invest 20p a day because even the copy in the library gets stolen by other Portfolio hopefuls."

Eight people shared the £4,000 daily prize, accumulated over two days. They are: Mr J S Taylor, of Northwood, Middx; Mr Max Watts, of Bedford; Mr Douglas Chard, of Delabole, Cornwall; Mr P S Thompson, of Camberley; Mrs Christine Manning, of Hampstead, London; Mr T Mottram, of London; Miss and Mr M R Bower, of London, SW11.

Sikh's punish President

The World Sikh Convention excommunicated President Zail Singh of India for ordering troops into the sacred Golden Temple complex during unrest in June. A Cabinet minister was also excommunicated during the generally peaceful meeting.

Page 3

Health rebate

People who take out private health insurance should receive a £50 government rebate, but those who go into health service hospitals should pay a similar sum for their accommodation, a report says

Page 3

Gang battle

Seven people, including a girl aged 14, were shot dead and 20 wounded in a battle between two motor cycle gangs in a suburb of Sydney. Page 4

Pavarotti out

Luciano Pavarotti has cancelled his appearance in Verdi's "Ernani" at the opening night of the 1984 San Francisco Opera season, because of the serious illness of his daughter Giuliana, aged 17.

Poly 'snobbery'

Employers treat polytechnic graduates as "second best", and many prefer campus sports success to a good degree, a government-backed study shows

Page 2

Leader page 11
Letters on miners, from Canon Eric James, and others; children, from Mrs M. Wynne, and others.

Leading articles:TUC; Non-Russian Soviet Republics; Joanna Southcott's Box.

Features, pages 8-10

George Walden on the dangers of political swop; Norman Macrae looks back on the future in the first of a three-part series.

Obituary, page 12

Mr S K Armitstead, Dr Robert Press

World Aerospace, pages 13-18
Aviation is moving out of recession and airlines are in a buying mood. A six-page Special Report looks at the Fariborough international air show and flying display

Page 2

TUC's pact with miners threatened by two key unions

- The TUC will adopt a pact of mutual aid for the striking miners, against a background of increasing signs that it will never be fully implemented.
- Mr Frank Chapple, the power union leader, has criticized both Mr Arthur Scargill and Mr Len Murray over the miners' dispute (page 4).

From Paul Routledge, Labour Editor, Brighton

The Trades Union Congress will today adopt practically by acclamation a pact of mutual aid for the striking miners, but there are increasing signs that it will never be fully implemented.

More than 12,000 workers in the steel industry are to vote in a secret ballot designed to prevent a blockade on the movement of coal and coke, and power station electricians will be urged by their union leaders to cross pitmen's picket lines.

The steel and power industries are the two most directly affected by the TUC General Council's decision to swing the full weight of the labour movement behind the National Union of Mineworkers (NUM).

Mr Len Murray, general secretary of the TUC, described the pact as "a clear lead on the miners' strike", and its backers believe it will win a majority of up to nine-to-one in a card vote.

The General, Municipal, Boilermakers and Allied Trades Union, the largest in the electricity generating stations, has called its officials to a special conference in Brighton tomorrow to discuss ways of implementing the TUC-NUM deal, which seeks to "block" all coal supplies and the oil widely being used as a substitute fuel.

Mr David Bassett, general secretary of the union, said: "It is in the overriding interest of trade unionists that the Government and the National Coal

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Continued on back page, col 6

3,000 police ready for mass lobby

By David Felton
Labour Correspondent

Leaders of the TUC were last night bracing themselves for the biggest demonstration seen at a congress for many years as striking miners started arriving in Brighton for a march and lobby next.

In an eve-of-congress attack on the two men, he gave a warning that even if delegates decide this week that all unions should cooperate in a national blockade of coal movements, its members would be ordered to carry on normal working – even if that meant crossing picket lines at power stations.

The split in solidarity, threatened by Mr Chapple, could wreck efforts by Messrs Scargill and Murray to unite the movement behind a TUC General Council policy statement to be debated today, supporting the miners by

Mr Bill Sars, general secretary of the ISTC and the fiercest critic of the TUC-NUM pact, last night made it clear that his union will warn its members that a vote to close the NUM could be a vote to close their steelworks.

If fully implemented, the general council's statement would amount to a general strike, he added, "and no one wants that because of the nation."

Continued on back page, col 6

Chapple says his men will work normally

By Glen Allan, Brighton

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In an

Polytechnic students suffer from employers' bias to university, report states

By Colin Hughes

Employers still treat polytechnic graduates as second best, although more polytechnic courses aim to prepare students for work, a government-backed study shows.

The three-year project investigating students' and employers' expectations of higher education underlines persistent "snobish" attitudes among employers, according to the team which was led by Dr Maurice Kogan, professor of government at Brunel University.

Students who spend their academic years buried in books without gaining a first-class degree, would be better off spending their time in sports teams, drama societies, and committees if they want to succeed at final job interviews, the study shows.

Many employers admitted that they used higher education attainment only to screen initial applications, and based their choice more heavily on A level grades obtained at school. Final selection of recruits rested more on whether an applicant had been "captain of boats" than the subjects he or she had studied during the past three years.

The researchers say that they found "considerable gaps" in employers' understanding of the British higher education system,

"including regular and large-scale graduate recruiters". Employers were "deeply conservative" and failed to fully exploit what the system had to offer.

A large body of employers would consider only undergraduates from Oxford, Cambridge, and certain red-brick universities. Only three out of 20 employers looked exclusively at polytechnic students. Students rightly rated motivation and leadership potential as the top qualities sought by prospective employers, but the students then expected work experience, course content and class of degree to count. In fact, employers were less concerned with academic performance than personal attributes and interests.

The researchers found that sixth formers applying for higher education also regard polytechnics as second best. Nearly half of students at polytechnics had also applied for university, and their A level grades were half as good. Once they had begun their polytechnic course 92 per cent of polytechnic students were satisfied and thought employers should take more notice of their vocationally oriented study.

Students wanted careers with rapid promotion, responsibility, and long-term prospects. Half

thought that prestige, social status and a high future salary were important, but the opportunities to travel and change jobs were higher priorities than a good starting salary.

Few students had any reservations about working for profit-making firms, and most believed that a thriving private sector was essential to the country's economic wellbeing, but 60 per cent were prepared to stay unemployed until they found the job they wanted.

One large recruiter of technical graduates told the researchers: "People only go to polytechnics if they cannot get into university. A levels are not a bad judge of a person's academic ability... If you get someone who is only capable of getting two 'E's they normally cannot get a university place, but they can get a place at a polytechnic."

One merchant banker who recruited exclusively from Oxford and Cambridge commented: "Nothing against polytechnics; it is simply that we can find the right people we want from the universities we go to, so why make life more difficult?"

Expectations of Higher Education (10 research papers), (Department of Education and Science, Brunel University).

Scheme would halve education bill

By a Staff Reporter

Proposals to halve the nation's education bill and save £7,000m from public funds are made posthumously today by Lord Vaizey, the Prime Minister's former economic adviser who died last month.

Shortly before he died Lord Vaizey drew up plans which he believed could slash the annual bill for education, according to him £300 a year at present for every man, woman and child in Britain.

He says that declining class sizes since the early 1960s have done nothing to improve school standards, and 10 per cent could be saved from the £7,000m

Cane used widely in schools

By a Staff Reporter

school bill by increasing the numbers in classes again.

Teachers should receive a simultaneous salary increase, but should be paid strictly according to performance.

Another five per cent would be saved by increasing the assisted place scheme, whereby less well-off parents receive grants to help pay for their children to be educated at private schools. Initially, Lord Vaizey says, the measure would increase public spending, but more parents would opt rapidly for independent schooling and would contribute towards it.

Most children would leave school at the age of 14, and go straight on to a four-year vocational course. The course would be run by the Manpower Services Commission.

Although that would increase MSC spending by £5,000m, another £2,000m would be saved by abolishing non-advanced further education, and saving on supplementary benefit.

Student loans and increased ratios of students to lecturers would save £1,200m of higher education costs.

Lord Vaizey's proposals are outlined in this month's *The Director* magazine, published today.

Lord Vaizey: Increase class numbers

Children more unruly, teachers believe

Three out of four school-teachers believe that children starting at primary schools are markedly more disruptive and badly behaved than they were five years ago, a survey shows.

Teachers are also disturbed by the growing number of children who enter reception classes without toilet training, defiance of teachers, destructiveness, use of obscene language and tantrums, had all grown worse in recent years.

Twenty schools said that more than half the pupils in reception classes posed discipline problems. One infant school in Barnsley said the 30 per cent of pupils presented serious discipline problems five

years ago, against 70 per cent now.

Another in Hampshire said that the figure had grown from 10 to 75 per cent and that children were unable to listen to teachers and showed a growing lack of respect for adults and property.

Teachers unanimously blame parents and the atmosphere at home and recommended that boys and girls should be better educated for parenthood at secondary school.

The association will hold a conference in London this autumn to discuss the report, *The Reception Class Today*.

Government 'failing to meet growing housing crisis'

By Christopher Warman

Property Correspondent

A strong indictment of the Government's housing policies in the face of the "rapidly deteriorating national housing situation" is contained in evidence by the Association of Metropolitan Authorities (AMA) to a housing inquiry chaired by the Duke of Edinburgh.

The association criticizes the low level of public investment in housing and says that the inquiry, set up by the National Federation of Housing Authorities, of which the Duke is patron, may be the last hope of producing a comprehensive plan of action for Britain's housing to match the deterioration and decline in standards.

In its evidence, which is published today the AMA says that "performance in all areas of the public and private sectors has declined dramatically since 1980. If the housing situation is not tackled now as effectively by the Government many of the postwar gains and indeed the improvement in the 100 years since the Royal Commission on Housing for the Working Classes, in terms of reduction of shortages and improvements in physical housing conditions, will be irretrievably lost. The consequences of not increasing the housing commitment, particularly in the inner cities, could be very grave."

The AMA says that ignoring inflation only £65 will be spent in 1984-5 for every £100 spent

on public housing in 1974-5. Allowing for inflation, that £65 is reduced to £21. In 1974-5, 9.7 per cent of the total public expenditure programme was spent on housing, while in 1984-5, the proportion will be down to 2.8 per cent. The last housing policy review, in 1977, said that 302,200 new homes would need to be built in 1983. That target was missed by 113,100 homes, a shortfall of 37 per cent, while the public sector, the shortfall was 59 per cent.

The AMA says that its recurring message is that housing needs more investment. The association estimates that almost £25,000m is needed to repair all the sub-standard housing stock in England. It concludes: "Another £10,000m is

needed to put right design defects and £15,000m to meet the shortage of housing in Britain. That is a total bill for both private and public sectors of £50,000m - the equivalent of about £1,000 for every man, woman and child in the country."

The AMA submission says that the Government's housing policy priorities lack "policies of homelessness, hotel provision, estate management, housing association, the housing needs of women, of ethnic minorities, of elderly people, of people who are physically ill or disabled, of people who are mentally ill or disabled, on mobility, on mitigate areas and on defectors." It concludes:

"A national housing strategy is

fundamental to solving the many and various housing problems and issues so evident throughout Britain."

● Public spending at twice the present level is needed every year for the next 10 years if London's housing crisis is to be tackled, a report published today by SHAC, the London Housing Aid Centre, states.

The report says that London needs 17,000 homes to be built each year for the next decade and a doubling in the level of renovation of existing property, which together would cost over £800m a year.

Capital Decay: An analysis of London's Housing. SHAC 189A Old Brompton Road, London SW3. £3.75.

After representations from Mr William Ross, Official Unionist MP for Londonderry East, the Northern Ireland Office is to review the case. Mr Ross said: "In this particular case, the problem is that because the mother was unemployed and, of course, it is a single-parent family, the child has no right to compensation."

Mr Dixon hoped he could get a discretionary payment to invest as a lump sum for his grandson when he was aged 18, but again the legislation relates only to when a husband has been killed and a widow is involved."

The boy's grandparents, while receiving child benefit and guardians' allowance of £14.10 a week, thought that they might be entitled to compensation through the

Criminal Injuries Compensation Northern Ireland Order 1977.

Legal experts say that the order looks at the case in purely financial terms and if someone has been unemployed, receiving state benefit, there has been no financial loss, and so no compensation.

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Animals and experiments: 1

Government's Bill will lead to new guidelines on pain

Tougher penalties for breaking the law on live animal experiments are being considered for inclusion in a government Bill to reform controls on animal testing. Peter Evans examines the debate about government policy in the first of two articles.

The government is expected to try to help solve a riddle at the heart of all legislation on experiments on living animals: how can anyone know the extent of the pain an animal is suffering?

A new Bill reforming control of experiments on live animals is expected to empower the Home Secretary to issue guidelines on pain. Some common understanding is vital to the whole debate. For the government says that, if an animal suffers severe pain that is likely to endure, it shall at once be painlessly killed.

Under new controls, no animal should be subjected to a level of pain greater than is appropriate to the procedure in question.

But what is the "appropriate" level? There is no means of measuring pain. The National Anti-Vivisection Society says that what may be estimated by one person to be severe pain may be dismissed by another as trivial.

As measurement of pain is not possible, reliance in framing and interpreting the guidelines would have to be based upon cumulative experience. A standard condition placing an upper limit on the degree or duration of pain which may be caused in experiments on live animals has been imposed in all licences issued under the 1876 Act since 1887.

The guidelines are expected to be among revised proposals by the Government after its White Paper last year. They are not likely to change its policy fundamentally but could further refine it.

Tougher penalties for breaking the law on experiments are being considered. At present fines of up to £100 can be imposed under the Cruelty to Animals Act.

There are also expected to be proposals for special safeguards for cats, dogs, horses, mules, asses and primates. The need to use them rather than other animals would have to be established before permission was granted.

The Government's revised proposals are expected to be issued in the New Year.

The Home Office acknowledges that the testing of cosmetics is "perhaps the most strongly criticized aspect of the present system".

Anti-vivisectionists argue that there is no need for the tests since products can contain ingredients whose safety has long been established through human experience.

In the longer term, it argues that national insurance contributions should be abolished in stages.

Pay rises top rate of inflation

Letters, page 11

Letters, page 11

By Bill Johnstone, Technology Correspondent

NHS charges for patients and private care rebate advocated by 'think tank'

By Nicholas Timmins, Social Services Correspondent

A £50-a-year rebate from the Government for everyone taking out private health insurance, and the introduction of an average £50 charge for accommodation in NHS hospitals, plus charges for visits to family doctors, non-essential drugs, family planning and non-emergency ambulance transport were recommended yesterday by the Adam Smith Institute.

For those unable to pay, the Government should provide a medicard, or health credit card to all recipients of social security, the free-market think-tank argues. It says, however, that such exemptions should not go too wide, or they would defeat the object of the exercise.

The medicard could be used to pay for private medical treatment, provided limits were set on charges, as well as for NHS treatment on which charges were levied, the institute says. That would allow more consumer choice, would encourage the private sector and reduce the strain on the NHS.

At present, the institute

argues, many of the resources of the health service are spent on people who are quite able to pay their own way. Charging, especially for non-essential services would seem a reasonable way of asking the more affluent to take up a greater part of the health care burden. A £5 a day charge for hospital accommodation, producing a £50 charge for an average 10-day stay, would mean putting the equivalent value on putting the equivalent value on health care that people put on a TV licence.

Charges should be introduced for injuries from dangerous sports. "It seems unreasonable that those who are cautious should subsidize those who deliberately expose themselves to risk of injury," the institute says, while consideration could be given to compulsory insurance for such activities.

Charges to visit the family doctor would help deter the estimated 40 per cent of visits to GPs by people who are not ill, the institute argues.

Providing a £50 a year rebate to those who take out private

Legal aid warning in divorce cases

By Jenny Knight

Couples about to be divorced are given a warning today to beware of unexpected costs that come when they discover they must pay for the legal services that they may have thought were free.

A book on divorce costs and legal procedures published by the Consumers Association shows that many people who battle through the courts with the help of legal aid fail to realize that if they win a cash or property settlement the money spent on their legal aid must be repaid from it.

Edith Rudinger, the book's editor, gives a warning that costs of a typical divorce where issues of property, cash and access to children are fought, may range from £800 per party to £3,000.

The book says that many people believe they will not have to pay anything if they are legally aided. They do not realize that if they win, the money they are claiming, their financial circumstances will have changed and the legal aid will have to be paid for. The Consumers Association estimates that legal costs range from £30 an hour for a solicitor in a county practice, to £100 an hour in a top City practice.

Many of the one-in-four couples seeking divorce in Britain today view obtaining

Divorce Legal Procedures and Financial Facts Consumers Association (£4.95).

Sour apples could ruin home trade

By John Young

Agriculture Correspondent

English apple producers are concerned that their efforts to regain a larger share of the home market from continental importers may be undermined by a few growers hoping to make a quick profit by selling unripe fruit.

Coxes, for example, will not be properly ready for eating for another month. But Mrs Teresa Wickham, chairman of the Women's Farming Union, fears that sour, immature fruit finding its way into some shops may deter people from buying Coxes when they are at their best.

Apart from a few early varieties such as Discovery, this time of year generally marks a lull between the ending of imports from the southern hemisphere and the start of fierce competition between English producers and the annual flood of Golden Delicious from France.

Airports record

A record 5.4 million passengers used the seven airports run by the British Airports Authority in July, a 7.4 per cent increase on the previous highest level in the same month last year. The airports are Heathrow, Gatwick, Stansted, Glasgow, Edinburgh, Prestwick and Aberdeen.

Highland posies: The Queen and Queen Elizabeth the Queen Mother, watched by the Prince of Wales, accepting bunches of heather on Saturday at the Braemar Games



Post office accused over 2nd class mail

Nearly one in five postcards sent by second class mail failed to arrive within three working days, according to a Mail Users' Association survey published yesterday.

With the second class stamp price rising by 1p to 13p today, the group claimed that the survey showed a "substantial and continuous shortfall in the second class quality of service".

A Post Office spokesman yesterday described the survey as "statistically invalid".

The Mail Users' Association logged posting and arrival times of 4,376 cards returned by companies and organizations. Only 80.6 per cent arrived by the third working day after posting.

The post office spokesman said its own figures showed 93.3 per cent of deliveries arriving within three working days.

The Association acknow-

Hammer blows killed major's family

The wife of Major Lance Ruck-Keene, a military intelligence adviser, and her two sons, who were found dead in a car on Friday, were killed by hammer blows to the head.

Major Ruck-Keene, aged 37, who was with his family, died from carbon monoxide poisoning, post-mortem examinations yesterday showed.

The bodies were discovered in a car at the family home in Green Lane, Shepperton, Surrey. Major Ruck-Keene, who worked at Whitehall, is believed to have been a military adviser to M16, the intelligence service.

Police are treating the deaths as domestic murders and a suicide. A date for the inquest is to be set.

Price rise, Times Information Service, Back page



Mrs Norah Harvey, daughter-in-law of Private Harvey (left) laying a wreath at the service. PC McCrory (right) shows the soldier's VC and four other medals yesterday (photographs: John Voss).

One man's tribute to forgotten VC hero

By Kenneth Gosling

Eighteen months ago Police Constable Nigal McCrory, of Nottingham sold a collection of medals worth £8,000 and paid £9,500 for a Victoria Cross. "It was the best move I ever made in my life," he says.

It was 66 years ago to the day that Jack Harvey performed the act of gallantry that won him the VC. A member of the 1/22nd Royal Regiment (the Queen's), he took a machine-gun post single-handed.

Then he ran along a trench for 200 yards and rushed an enemy dugout, compelling 37 Germans to surrender. "By these two acts of great gallantry", the citation says, "he saved the company heavy casualties and enabled the whole of the attacking line to advance".

PC McCrory was shocked to find Jack Harvey's grave unmarked and unkempt; it was the regiment that cleaned it up

and provided a headstone and arranged yesterday's service of commemoration.

PC McCrory is keeping the VC in a bank "for the foreseeable future". It had spent 20 years in Canada before coming on the market and was reputed to have been sold by Private Harvey's widow for £50 after she remarried.

He is hoping to get an artist friend to do a painting of Harvey performing his act of valour which he plans to present to the regiment. It will show him wearing all his medals, including the VC which PC McCrory regards as equal in philatelic terms to securing a rare Penny Black.

It is all part of PC McCrory's personal tribute to the magnificence courage and dogged determination of a brave soldier.

Forty years after the end of the Second World War, Bognor Regis honoured its war dead yesterday. When two tablets containing the names of 255 servicemen and women who lost their lives fighting between 1939-45 were unveiled at the

Lifeboat men honoured

More than 100 lifeboaters - and one woman - received the freedom of the borough of Great Yarmouth yesterday. The past and present crews of the RNLI stationed at Gorleston, and of the privately run volunteer boat at Caister assembled for the ceremony. The woman was Kim Edwards, aged 25, and the oldest lifeboater present was Mr Charles Knights, aged 95.

Father is questioned about dead baby

By a Staff Reporter

Police were yesterday questioning Mr Andrew Neil, the father of Tyra Neil who died on Saturday aged 21 months, while Mrs Janet Boateng, chairman of Lambeth social services committee, met care chiefs to set up an inquiry into the death.

The baby had been thrust into the arms of a nurse at Guy's Hospital three days earlier by an aunt. The child was covered in bite marks and bruises and was operated on for head injuries. A post mortem examination will be held this afternoon.

Police said that they wanted to talk to her father, and late on Saturday night Mr Neil, aged 20, an unemployed electrician from Bonham Road, Brixton, went into Brixton police station with his solicitor. He was interviewed yesterday by Det Chief Supt Colin Evans.

The baby had been made a subject of a council care order after her brother, Tyrone, was blinded when aged four months old. Tyrone, now aged three, is cared for by foster parents.

Mrs Boateng said yesterday: "I am calling for full inquiries, for both an internal one and then an independent one."

"I shall be asking for a full explanation of the circumstances surrounding the death of Tyra. We have some good child care policies in Lambeth and I think it is too early to talk of making changes. Most likely something went wrong in this case, but it is too early to comment."

Mrs Boateng said that the council's internal inquiry will begin today. She expects the results in two weeks and then plans to set up an independent inquiry led by child care experts who are not connected with Lambeth council.

The police have already questioned and released Claudette Henry, aged 20, the dead girl's mother, who lives in Brixton.

RETIREMENT PENSION WIDOW'S BENEFIT CHILD'S SPECIAL ALLOWANCE CHILD BENEFIT

How to get your benefit during DHSS industrial action

We are sorry that industrial action at our Newcastle computer centres means that some changes are still necessary in the way some benefits are paid:

If you get your pension book from a local DHSS office because your retirement pension is combined with supplementary pension, you can ignore this information. Otherwise, please check below to see whether you are affected, then follow the advice given.

RETIREMENT PENSION, WIDOW'S BENEFIT, CHILD'S SPECIAL ALLOWANCE OR CHILD BENEFIT

If you have a current order book continue to cash it at the post office in the usual way until it runs out.

When your order book runs out you can still be paid on it at the post office. But the post office can only make one emergency payment at a time, so go there every week, or every 4th week if you are paid 4 weekly. Take your old order book with you, and your second book if you have one. If you can't go there yourself someone else can collect your money for you, but they must take evidence of their own identity with them.

If you are temporarily away from home you can get up to two emergency payments on your old book at

another post office. Check the notes on the inside back cover of your order book.

If you do not collect your payments every week, the missed payments will be made to you when normal service is resumed. If you cannot wait until then, contact your local DHSS office.

However, you cannot be paid on your old order book if

• your book was for widow's allowance (contact your local DHSS office for advice), or

• you have applied to change to payment by credit transfer (see below).

RETIREMENT PENSION OR WIDOW'S BENEFIT ONLY

If you are already paid by credit transfer, payments will normally continue to be made to your account at the same rate as your last payment. If no payment is made, contact your local DHSS office.

If you have applied for payment by credit transfer but no payment has yet been made into your account, contact your local DHSS office. Let them have your old order book if you still have it.

Paying orders cannot be issued by the Newcastle computer centre during the industrial action. If you are normally paid 4 weekly or quarterly by payable order, write to, phone or call at your local DHSS office (or if you live outside the UK write to DHSS Overseas Branch, Newcastle upon Tyne, NE98 1YX). Let them

have your full name and address and the whole tear-off portion of your last payable order, if you still have it. Otherwise, give your pension number, the type of pension, the weekly amount and the normal payment interval. You only need to do this once.

CHILD BENEFIT ONLY

If you are already paid by credit transfer, or if we have written to say you will be paid in this way when your order book runs out, your payments should not be affected. But there may be slight delays in crediting your account. If a payment has not been made by the due date and you cannot wait a few days, contact your local DHSS office for advice. Let them have your old order book if you still have it.

New claims

If you have claimed child benefit for the first time, or have claimed for another child, there may be some delay before we can pay you. This applies whether you have asked for payment by order book or credit transfer. If you cannot wait, contact your local DHSS office.

If you don't have your order book or there is a change in your circumstances, please get in touch with your local DHSS office. Please do not write to DHSS Newcastle (unless you live abroad) until further notice.

Department of Health and Social Security

TUC/BRIGHTON

● Minister's pit call

Walker challenges unions to refuse support for Scargill and strikers

By Anthony Bevins, Political Correspondent

Mr Peter Walker, Secretary of State for Energy, yesterday challenged the TUC to refuse support for Mr Arthur Scargill and the striking miners.

He told a Young Conservative summer school in Manchester: "The coal board loses millions of pounds and coalface after coalface is destroyed by neglect."

"The country suffers from violence, loss of production, and loss of markets. The simple fact is that there would have been no trouble for the TUC, the NUM, the coal board or the country if the NUM had complied with its normal procedure and held a ballot before a strike took place."

"The rejection of that procedure has brought division and misery. The TUC this week has a duty to be the true voice of its members and not an expression of a minority political viewpoint."

Murray predicts unity

This week's Congress would be a united one, Mr Len Murray, the TUC general secretary said yesterday.

"This will be a Congress of common purpose and a shared determination to resist assaults upon the livelihood and living standards of our members and to chart the way forward to the industrial and economic regeneration that Britain so urgently needs". Mr Murray said at a press conference.



At the front: Mr Arthur Scargill takes a stroll at Brighton yesterday. (Photograph: Peter Trevor).

Fresh ballot ruled out at Tilbury

By Barrie Clement

Dock workers' leaders refused to hold another strike vote at the key port of Tilbury and promised that there would be a national picketing campaign starting today at the big docks still operating.

Mr John Connolly, national docks officer of the Transport and General Workers' Union, said that there was no need for port workers to vote on the strike because it had been endorsed constitutionally and was in support of nationally agreed policy.

Mr Connolly said that there would be a drive to persuade working dockers at 48 of Britain's 72 registered ports to come out, together with an appeal for those outside the National Dock Labour scheme to join the action.

The response to the strike call was not satisfactory. Mr Connolly said, but it was only the smaller units within the scheme that were holding out, with 9,500 out of its 13,500 registered workers idle.

Yesterday's decisions will add to the bitterness at strike-bound Tilbury where there is a widespread belief that a vote on the stoppage last Thursday went against the action.

Mr Connolly said that the campaign to "picket out" recalcitrant members would concentrate on docks handling goods diverted from ports stopped by the action.

Felixstowe, Dover and Sheerness would be among the no targets, but there was no intention to disrupt passenger ferries, Mr Connolly said.

Mr Connolly has requested a meeting with the National Dock Labour Board about the use of non-registered labour to land fish at Grimsby.

Grain trade hope

Fears that a long strike will seriously hinder grain exports and cause a shortage of storage capacity are being largely discounted (John Young writes).

Although much of the grain trade uses ports such as Liverpool, Southampton, Hull and Tilbury, which are strike-bound, the pattern has been steadily changing. An increasing proportion now goes to smaller ports, particularly in East Anglia.

Police paying a high price

By Peter Evans, Home Affairs Correspondent

As the extra cost of policing the miners' dispute reaches £120m in Britain the strain is beginning to tell.

Already Greater Manchester has slapped a two months' ban on recruiting, which could stay for the rest of the financial year if the dispute goes into next month, according to Mrs Gabrielle Cox, chairman of the police committee.

The Chief Constable of Strathclyde, Sir Patrick Hamill, said last week that normal service to the community would be badly affected unless his budget was increased. The extra cost of the National Union of Miners' action up to July 20 was £1.8m.

Faced with a shortage of manpower, Mr Peter Imbert, Chief Constable of Thames Valley Police is pulling men out of specialist squads to provide more cover on the beat. He is expected to ask his police authority next month for about £500,000 to stave off further cutbacks. The reason is extra commitments such as the miners' dispute and Greenham Common protests.

Mr Edwin Shore, who chairs the police and fire committee of the Association of Metropolitan Authorities, and is chairman of the West Midlands Police Authority, says that the detection rate there has fallen from 35 per cent to about 29 per cent.

The absence of officers who have been on duty in neighbouring counties has clearly affected policing, he says.

The extra cost of the dispute in the case of 35 forces in the other counties of England and

Wales to the end of July was £78m. But by this last weekend the figure was estimated to have risen to £95m, according to figures compiled for the Association of County Councils.

They show that the main component of the extra cost is overtime.

● Thirty per cent comes from overtime worked by forces policing picketing in their own areas.

● Ten per cent is the extra cost of providing normal cover in areas where there is an NUM dispute while other officers are specially deployed to it.

● Forty per cent is overtime of officers sent on mutual aid.

● Five per cent covers the overtime needs in the force providing the aid: fewer police have to do more.

The Police Federation confirms that a police constable on duty at a picket line could get £400 or £500 a week in overtime and basic payments.

The Police Federation says that disputes are increasing between officers and their police authorities over overtime payments. One of the reasons is a fear by the police authority from which the officer comes that the receiving authority will not reimburse the amount claimed.

There is a missing figure in the total, the cost involving the Metropolitan Police. Since March 14, officers have been sent to nine authority areas.

The biggest recipient was Nottinghamshire.

The extra cost of policing the miners' dispute for the five Scottish forces involved was £2.4m to the end of July.

Lost wages average £4,543, NCB claims

As the miners' strike enters its 26th week the National Coal Board claimed yesterday that the dispute overall has cost miners an average of £4,543 in lost wages (Glenn Allam writes).

"With average wages of £165 a week, the 25 weeks' stoppage has cost each miner £4,125," a coal board spokesman said.

"But it must be remembered that the strike was preceded by a 19-week so the overall loss of earnings for the average worker now amounts to £4,543."

The cost to the board in terms of lost sales has been calculated at about £500m, but there was also an incalculable extra cost in terms of lost confidence by customers, which could affect future sales, and which could be evaluated only when the industry was back in operation.

Last night, Mr Michael McGahey, a National Union of Miners' vice-president, refused to comment on the board's estimates.

● Ten stipendiary magistrates are to be moved into Yorkshire

● The political battle

General council's ruling group to lose seats to left

By David Peltz, Labour Correspondent

The centre-right group which controls the TUC general council is likely to see its influence diminish this week, with the left picking up extra seats on the labour movement's governing body.

Election results for 11 of the 50 seats on the council will be announced in Brighton to-morrow and although it is possible that the left will lose one of the six seats it holds, it will make inroads in other areas.

The main changes, ironically, will flow from the principle of automatic representation for unions with more than 100,000 members, which this year will mean 33 seats and to which the left has been strongly opposed.

The right-wing Amalgamated Union of Engineering Workers, which last year affiliated more than a million members to the TUC, giving it four seats on the general council, will this year have only three because its membership has fallen.

Mr Ray Alderson, a communist, will replace Mr Alastair Graham, the vociferous right-wing general secretary of the Civil and Public Services Association, because of a decision by the union's new left-wing executive earlier this year to withdraw its support for Mr Scargill.

The left will also be able to call on Mr Raymond Buckton, general secretary of Aslef, the train drivers' union who this year has been forced to adopt a less partisan role because of his position as TUC chairman. His replacement in the chair, Mr Frank Chapple.

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The new general council will take over at the end of Congress on Friday and its political complexion will be of great significance as it grapples with several controversial issues facing the TUC, most notably the six-month miners' strike.

The most important motions will go before the TUC Congress today and tomorrow. This afternoon delegates will debate the miners' strike and the Government's ban on trade unions at the Government Communications Headquarters at Cheltenham.

Tomorrow, trade union legislation is on the agenda together with labour market policy, social insurance and industrial welfare.

On Wednesday there will be debates on education, economic policy, where unemployment will be the dominant issue, and the movement's campaign against privatisation.

Motions on equal rights and international matters will be debated on Thursday. Friday, the final day, will be dominated by the election of a successor to Mr Len Murray.

Leading article, page 11

Dikko police puzzle on crate escape

Anti-terrorist squad detectives were still searching for the British of Group Captain Bernard Banfa, managing director of Nigeria Airways, who was wanted for questioning in connection with the kidnapping of Alhaji Umaru Dikko, the former Nigerian transport minister, in London in July.

They show that the main component of the extra cost is overtime.

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Last night, Mr Michael McGahey, a National Union of Miners' vice-president, refused to comment on the board's estimates.

● Albert Hirst and Son, makers of world-famous black puddings, has been forced to close because of the strike. The firm, based in Barnsley, has gone into liquidation.

Letters, page 11



Comrades' grief: Two Sydney 'bikers' mourn over the body of a fellow member

Seven die in gang battle

Sydney (Reuter) — Seven people including a girl aged 14, were shot dead and 20 wounded yesterday in a gang war between two motorcycle gangs in a car park outside a suburban Sydney hotel.

Members of the gangs, the Banditos and the Comancheros, opened fire with pump-action shotguns and fought for nearly an hour with machetes, screwdrivers and baseball bats.

They called a brief truce to allow casualties to be taken to hospital but carried on fighting when the car park was cleared. Police said fighting flared again in casualty

wards between gang members who had accompanied wounded companions to hospital.

When police finally restored order the toll was seven dead, including the girl caught in the crossfire as she was selling charity raffle tickets. Four of the injured were in a serious condition.

Terrified lunchtime drinkers at the Viking Tavern, in the south-western suburb of Milperra, dived for cover behind the bar and under the tables when the battle began. Several hundred people had gathered around the hotel.

Sri Lankan forces massacre civilians

From Donovan Moldrich Colombo

Security forces at Point Pedro, the northernmost town in Sri Lanka, went on a rampage on Saturday night, killing many civilians and setting fire to a number of shops and a leading college. They were reacting to the killing of four policemen that afternoon, when a lorry in which they were travelling was blown up by a landmine at Tikkam, two miles from Point Pedro.

Mr Appapillai Amirthalingam, secretary-general of the Tamil United Liberation Front, told President Jayewardene at the all-party talks yesterday that he believed 18 civilians had been killed at Point Pedro.

Mr Kumar Ponnambalam, secretary-general of the All Ceylon Tamil Congress, who did not attend the talks, said he had heard that five civilian bystanders were shot at the scene of the explosion and that 19 were killed later.

The Minister of National Security, Mr Lalith Athulathmudali, said that according to government information between six and 10 civilians had been killed and some shops had been burnt. He had not heard reports that Hartley College had been set on fire and that its science laboratory and library had suffered damage.

He said the Government had asked the Inspector General of Police, Mr Rudra Rajasingham, to fly to the north to investigate.

He was certain reports of the armed services going on a rampage were exaggerated but, if warranted, disciplinary action would be taken, as had happened at Mannar a fortnight ago.

● DEADLINE SET: After unprecedented weekly meetings of the all-party conference, President Jayewardene announced yesterday that the Government had taken into account the representations of all the delegations.

Storm toll tops 150 in Seoul and Philippines

Seoul (Reuter) — More than 100 people were feared dead yesterday as South Korea struggled to recover from three days of torrential rain, floods and landslides.

Thousands of soldiers, police and villagers battled through mud, water and sludge in rescue and repair operations. The known death toll in flood-stricken northern areas has risen to 65, and 42 other people are feared dead and at least 49 injured.

The Han river, which flows through Seoul, threatened to burst its banks. More than 50,000 people living near the river have been evacuated.

The typhoon was the strongest since October 1970 when Typhoon Joan battered the country with 170mph winds and left 575 dead.

The death toll is expected to rise sharply after communications are restored.

Zermatt first

Zermatt (AP) — A Frenchman, Pierre Gevaux, made the first-ever parachute jump from the 14,690-ft Matterhorn. A light wind enabled him to clear the Swiss mountains.

Alhaji Dikko, meanwhile, has broken his silence for the first time since the kidnapping.

In an interview published yesterday in the *Sunday Times*, he described how he had been warned that his life was in danger.

"I was warned all the time. Many friends told me to be careful. But I had to live, I had to go on," he said.

He said he had been staying at his house in Porchester Terrace in west London. "The star sent a shock through me. I was on foot, alone. I didn't run. They grabbed me and held me. They took hold and banged me against the van. I hurt my back, God, the pain."

He described how his secretary got a message to him on his electronic pager: "It was a great relief to me. Then they jabbed (drugged by injection) me and sat on me."

The next thing he remembered was waking up in the Herfordshire and Essex Hospital in Bishop's Stortford after he had been rescued from a crate at Stansted Airport which was about to be loaded into a Nigeria Airways jet bound for Lagos.

Albert Hirst and Son, makers of world-famous black puddings, has been forced to close because of the strike. The firm, based in Barnsley, has gone into liquidation.

Alhaji Dikko also rejected allegations of corruption while he was minister of transport in Nigeria and denied that he was a

Sikhs excommunicate Indian President for ordering temple assault

From Kuldeep Nayar, Delhi

The World Sikh Convention at Amritsar has excommunicated Mr Zail Singh, President of India and Mr Buta Singh, the Sports Minister, both Sikhs. It has also endorsed the Sikh high priests' ultimatum that if the Army was not withdrawn from the Golden Temple by September 30, they would lead a "march of believers to liberate" it.

Despite tight security, some 30 foreigners reached the convention, which was attended by 20,000 Sikhs. It was peaceful except for the stir at times created by the slogans of "Khalistan" or "Jo boley so nihal, sat sri Akal" (an invocation to God).

Opposite the site of the convention a Khalistan (the separate state sought by the Sikhs) flag was hoisted. The authorities took some time to remove it, because a large crowd gathered.

The line taken by the convention suggests there is little common ground between the Akalis (the Sikh party), who organized the meeting, and Delhi. On the eve of the convention the Home Minister, Mr Narasimha Rao, said in a statement that the Government would be prepared to resume talks with the Akalis provided they denounced secession and agreed that the Sikh temples would not be used for political purposes, storing arms or giving shelter to wanted people.

The convention paid homage to Sikh men, women and children "who laid down their lives" during the military operation in the Golden Temple and other shrines.

It was alleged that the "communal-minded central Government" used the excuse of an operation against "some terrorists" to blow up buildings within the temple complex, in addition to burning 2,500 historic hand-written volumes of the Sikh holy book.

Surprise in Vienna Cabinet reshuffle

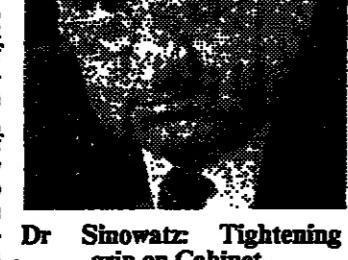
From Richard Bassett, Vienna

In a move to tighten the grip of Chancellor Fred Sinowatz on his Cabinet, Austria's most drastic reshuffle for a decade is to be announced officially today.

Both the foreign and finance ministries will get new heads in the reshuffle which, although it was expected, surprised many Austrians by its suddenness and scale.

Dr Herbert Salcher, the outgoing Finance Minister, had for some months intimated his desire to resign because of serious differences with Dr Sinowatz over proposals for reforming the tax system. Dr Salcher's successor, Dr Franz Vranitzky, at present director of Austria's Landerbank, is considered to hold financial views more in line with the Chancellor.

A more surprising change, indicative of the somewhat unpredictable hierarchy of Austrian politics, is the appointment of the new Foreign Minister, Dr Leopold Grauzer, who is currently Mayor of Vienna. He succeeds the highly respected Dr Irwin Lanc, who although considered to be an intellectual heavyweight is believed to have been offered his



Dr Sinowatz: Tightening grip on Cabinet.

Hijackers returned to India

Delhi (AP) — Seven youths who hijacked an Indian Airlines flight to Dubai more than a week ago are being returned to India after the United States rejected their appeal for political asylum, the United News of India news agency said yesterday.

The hijacking, the second by Sikh extremists in less than two months, ended when the youths fled the last 74 hostages and surrendered.

The Boeing 737 was hijacked about 39 hours earlier on a flight between Delhi and Srinagar, capital of Kashmir.

It was diverted first to Lahore, Pakistan and then to Karachi before flying on to the Middle East, where it made an emergency landing at Dubai with its fuel nearly exhausted.

The hijackers, who shouted slogans condemning the Indian Prime Minister, Mrs Indira Gandhi, and calling for a separate state for India's 13 million Sikhs, said they wanted to go to the United States.

However, United States officials, citing American adherence to the Hague Convention against air piracy, said they would be arrested if they reached United States territory.

Tension a legacy of centuries of antagonism

When President Chun Doo Hwan of South Korea arrives in Tokyo on Thursday he will be the first leader of an independent Korea to set foot in Japan on an official visit in almost 40 years. David Warr, Tokyo Correspondent, examines the reasons for the long standing state of tension between the two nations in the first of two articles.

President Chun Doo Hwan may well be the first friendly visitor from Korea of such high rank since Koreans helped to modernize Japan through the import of Chinese culture in the sixth century.

The convention paid homage to Sikh men, women and children "who laid down their lives" during the military operation in the Golden Temple and other shrines.

It was alleged that the "communal-minded central Government" used the excuse of an operation against "some terrorists" to blow up buildings within the temple complex, in addition to burning 2,500 historic hand-written volumes of the Sikh holy book.

The history of this tension can be traced back to the sixth century, when the tribes of what eventually became Japan

absorbed much from the Korean peninsula through Korean artisans and scholars. Antagonisms hardened in 1910, when industrialized Japan annexed Korea, forcing Koreans to learn Japanese and importing thousands of them as slave labour.

They were compelled to take Japanese names, yet denied citizenship and access to most employment other than menial work. "They were not quite as bad as Hitler," according to one Korean, "but they came fairly close".

Since independence, relations have been further strained by Japan's enormous economic influence and Korea's transformation into something approaching an economic colony of Japan in the eyes of many South Koreans.

Efforts to ease the tensions began in earnest in January last year when Mr Yasuhiro Nakasone, the Japanese Prime Minister, became the first Japanese leader to visit Seoul. But they still have a long way to go.

The Japanese have always thought of themselves as a unique people, and this sometimes expresses itself in a feeling of superiority, particularly with regard to other Asians. Many Japanese feel a sense of cultural and economic superiority over the Koreans and, given Japanese treatment of Korea in the past, this has caused and still causes deep and bitter resentment among Koreans.

Certainly, the fact that 20 years have passed since diplomatic relations were established between the Seoul Government and its former colonial masters without such a visit is a graphic illustration of the historical, racial and political strains that still linger.

The history of this tension



Trailblazers: President Chun (left) and Mr Nakasone when the latter visited Seoul last year.

domestic political considerations would not allow it.

Even today, after almost 20 years of diplomatic relations and extensive trading and business ties, the Governments of both Japan and Korea are nervous at the prospect. Mr Shintaro Abe, the Japanese Foreign Minister, admits to fearing tension, and declares there is no guarantee that the visit will be a success.

Success depends very much on how public opinion in South

Korea views the visit. Koreans want the Japanese to recant sincerely for what happened during the Second World War and to show they no longer regard Korea as merely a vassal state.

Both the South Korean leader and Mr Nakasone are taking a considerable risk with their domestic constituencies.

In Japan the right, particularly at a time when the country's international self-confidence has reached new heights, believes that the Japanese have nothing to apologize for and it resents any attempt to involve Emperor Hirohito in matters political.

But the Tokyo Government feels that the South Koreans must now be given every support to prevent North Korea from starting a war. It is widely recognized that the next four years will be crucial in this respect, since the North's military superiority will probably decline thereafter.

The benefits for Mr Nakasone could be further enhanced by his image as a bold, outward-looking statesman, but the left could attack him for supporting a repressive semi-dictator and taking Japan into a de facto military alliance with Korea.

For President Chun, lack of humility on the part of the Japanese would bring criticism that he had merely kowtowed to the Japanese, lost national pride and gained little or nothing in return.

Tomorrow: Question of honour

Spain gloomy over EEC entry

From Richard Wigg, Madrid

Spain today is going into what is supposed to be the final round of its negotiations in Brussels for entry to the EEC.

Its mood is pessimistic, with France, one again seen as the stumbling-block.

The remarks were taken by Madrid to suggest that France will try to delay Spain's entry until the Community has resolved the problem of its already huge wine surplus.

The Spaniards are alarmed because word from Lisbon is that Mitterrand spoke to Dr Mario Soares, the Portuguese Prime Minister, about the Spanish negotiations now being in a blind alley.

The job of the Spanish negotiators, well aware of British and German opposition to continued financing of the

EEC's agricultural surpluses, is not made any easier by Spain's expected record agricultural output this year and record surpluses of wine and olive oil.

"Let the French block our negotiations: if they think with this we are going to back down they are mistaken", a senior Spanish negotiator remarked.

Señor Morán saw Señor Manuel Fraga, the opposition leader, who has also condemned French tactics, before leaving for Brussels.

Señor Carlos Romero, Spain's Agriculture Minister, faces an olive harvest of almost 600,000 tonnes this year, against 253,000 last year. He has announced that 50,000 pescetas (more than £230m) will have to be spent to buy up the surplus of an expected 50 million hectolitre wine harvest, some 15 million more than last year.

Successful solar panel test by space shuttle

From Nicholas Ashford, Washington

The United States has moved a stage closer to achieving its stated aim of having a permanent station in space orbit before the end of this century, with the space shuttle Discovery's successful testing of a solar panel which extended about 100ft above the craft.

The device consisted of a 13in-wide mast covered with small solar panels which was raised above the shuttle like an elongated rectangular sail.

Most of the panels were dummies but the outermost ones contained three working cells for converting sunlight into energy. The \$6m (£4.6m) test project was seen as a first step in developing lightweight structures that can be used in an orbital construction site for a permanent space station.

President Reagan has said the

next aim of the United States space programme should be to have a manned space station in orbit during the 1990s.

The initial testing of the solar mast was completely successful. The space astronauts have also successfully deployed three communications satellites during the maiden voyage.

The success of these tests compensated for the series of mishaps which delayed the launch of the Discovery by more than two months. In a telephone conversation with President Reagan, Commander Henry Hartsfield, the mission chief, remarked: "This is such a tremendous ride you ought to try it sometime yourself." "You mind if I think that one over?" the President responded.

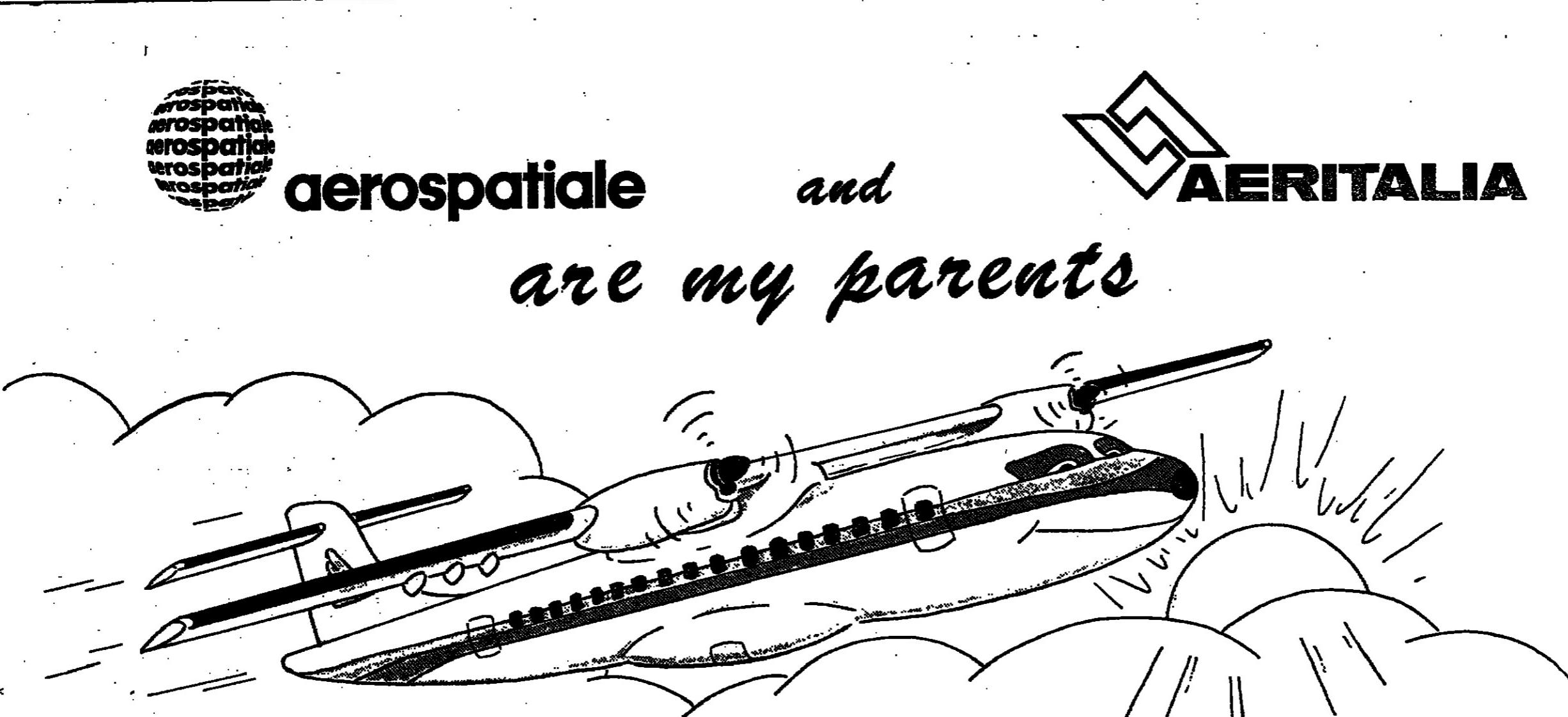
The Discovery is due to return to earth tomorrow.

aerospatiale and
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The Star Wars debate

Chernenko interview in Pravda fails to dispel health rumours

From Richard Owen, Moscow

President Chernenko's interview in *Pravda* yesterday, attacking the Reagan Administration over the "star wars" talks, has done nothing to dispel the mystery surrounding the Soviet leader's whereabouts and state of health.

"We have been through this before," one western observer said - a reference to the fact that President Andropov also gave written answers to *Pravda* during his six-month illness and absence from public life.

Mr Chernenko, who turns 73 this month, has not been seen for nearly two months. He went to the Crimea on holiday in mid-July after talks with Senator Javier de Cuello, the United Nations Secretary-General, but his return to the capital has still not been announced, a departure from established custom.

According to some reports, Mr Chernenko is seriously ill and was admitted to a Moscow hospital last month.

On Saturday, *Pravda*, carried an account of a session in the Kremlin of the Presidium of the Supreme Soviet, of which Mr Chernenko is chairman. The newspaper said the Presidium had discussed his ideas on the "authority of rural Soviets" but did not indicate that he had been present. A similar technique has been used in Tass reports of the last two Politburo meetings.

A telegram was sent to the

President of Singapore on Saturday in the name of the Presidium as a whole rather than Mr Chernenko personally. Ordinary Russians and foreigners are alert to such signs: "After Andropov, there is no law of diminishing credibility," one Soviet source remarked. "The *Pravda* interview does not prove that Chernenko is in charge, only that the Kremlin wants people to think so."

The President made no public appearances on "Knowledge Day" on Saturday, marking the new academic year, although giant posters bearing quotations by him on communism and youth went up on Moscow streets.

In the interview, published at the top of the front page, Mr Chernenko noted that Washington had announced it was sending a delegation to the Vienna talks on space weapons later this month, but did not say whether Russia would do the same.

He said the Soviet proposal was limited to space weapons, whereas the United States wanted to "replace the very subject of negotiation" by including the disrupted Geneva missile talks as well. "The American approach is directly opposed to ours," he observed. "So what would be the point of holding talks?"

The Soviet leader held out a slight prospect of progress by

saying that if America and Russia did reach agreement on "star wars" issues in Vienna this month, this would "facilitate the solution of questions of limiting and reducing other strategic armaments. I would particularly like to emphasize that."

Diplomats see this as a hint that if the United States agrees to confine the Vienna agenda to space weapons, Russia will then resume the Geneva Start (strategic arms reduction) talks.

President Chernenko's tone was bleak. He said the Republican convention in Dallas had made a depressing impression, and the Reagan Administration was obsessed by force and greater power ambition.

"They are simply losing all sense of reality," he said, adding that the United States would have to deal with Russia "on an equal footing" and with the legitimate interests of both sides in mind. "There is no sensible alternative to this."

Mr Chernenko told *Pravda* that Moscow favoured serious and concrete talks and honest and serious dialogue with the United States. But Washington was "flexing its military muscle" and had not given a positive response to Soviet proposals, including its call for a reciprocal moratorium on the development of weapons in space.

The massive approval given by Moroccans in a referendum to their country's alliance with Libya is in stark contrast to the surprise, even consternation, shown not only by Morocco's neighbours but also by King Hassan's closest allies, the United States and France.

For the French the military aspect of the Libya-Morocco union is a potentially serious development. For more than a year they have had more than 3,000 troops stationed in Chad defending its Government against Libyan-backed rebels, and a direct confrontation between France and Libya cannot be ruled out. But now Libya is formally allied with Morocco, a traditional friend of France and an important trading partner.

In the absence of official information - it was not even known when the French President was due to leave or whether he had held further talks with King Hassan - most observers speculated that his visit was connected with the implications for the conflict in Chad of the "union" between Libya and Morocco.

However, the French almost certainly see not only danger in the Libya-Moroccan pact, but it is a meaty affair. Not only does it entail close economic and political cooperation but it amounts to a mutual defence pact. One article says specifically that aggression against either party will be considered as aggression against the other.

This is one important reason

why news of the alliance brought both President Francois Mitterrand of France and General Vernon Walters, President Reagan's special roving envoy, hurrying to Morocco on what they hoped would be secret missions to find out just what King Hassan was up to.

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This is one important reason

Reagan well ahead in opinion polls as campaign opens

From Nicholas Ashford, Washington

Today is Labour Day in America, a time when Americans end their summer holidays and return to their offices, factories and classrooms for another year's hard work.

Every four years Labour Day also formally marks the beginning of the presidential election campaign, a time when presidential and vice-presidential candidates set out on a series of barnstorming tours around the country in the hope of winning enough votes to spend the next four years in the White House.

This year both parties' candidates have made premature starts to their campaigns but, recognizing the symbolism of the Labour Day kickoff, President Reagan and Mr Walter Mondale, his Democratic challenger, are planning to begin their campaigns in traditional style with a rapid sweep across the country.

Mr Reagan is beginning in his home state of California in the town of Anaheim, the home of Disneyland and one of the most conservative voting groups in the country.

He then goes on to make addresses in Salt Lake City and Chicago before returning to Washington in the latter part of the week.

The three speeches he will make on this tour will focus on the three main themes of his campaign: his stewardship of traditional American values, his strengthening of American

Flowers put two Poles back in jail

From Roger Boyes
Warsaw

The Polish authorities have signalled how they will cope with the more determined and vociferous leaders of the banned Solidarity trade union by arresting and promptly sentencing two recently freed organisers of the underground opposition to General Jaruzelski's Government.

Since the Polish Government announced an amnesty for political prisoners in July, the fate of Solidarity leaders who try to revive the opposition has been in doubt. The amnesty prompted President Reagan to lift some economic sanctions against Poland, but there was concern in the West that the prison cells would promptly be filled again with activists reluctant to abandon their protests.

Two leaders of the Solidarity underground in Wroclaw, Mr Wladyslaw Frasyniuk and Mr Josef Pinior, attempted as part of union protests throughout the country to lay flowers at a plaque commemorating the registration of the union. The police detained them and their wives and by the evening had charged the men with attempting to disturb the peace and sentenced them to two months' jail.

The amnesty has a number of strings. One is that if a freed political prisoner is caught committing a "similar" offence he is liable to immediate arrest and will have to serve out the former sentence as well as the new jail term. It appears that the authorities will not use such heavy means against Mr Frasyniuk and Mr Pinior, though their friends say that two months is a harsh sentence for laying flowers.

"It seems that they will have a tight-leash policy from now on," a prominent Solidarity organizer said at the weekend.

So far the Solidarity leaders Mr Seweryn Jaworski, Mr Jan Rulewski, Mr Frasyniuk and Mr Pinior have been formally warned by the police about their public statements.

Chiefs punished for Israel trip

From Eddie Iroh, Lagos

Federal and state military government authorities have announced tough sanctions against two traditional leaders who made a widely-publicized visit to Israel.

Statements issued simultaneously in Ibadan and Kano said that the two rulers, Obafemi Williams and Oba Sijuwade II, the Ooni of Ife, and

embarrassment at Western press reports that the chiefs had been confined to their domains for six months. Their passports were also declared invalid and confiscated by the Nigerian Security Organization.

A fortnight ago, the External Affairs Minister, Dr Ibrahim Gambari, expressed Nigeria's

Britain's South Africa stance condemned

By Henry Stanhope, Diplomatic Correspondent

Government which has been dancing around the issue with the delicacy of an elephant with children.

The AAM accuses Mrs Thatcher's administration of softening its attitude toward Mr Botha since early last year. First, it says, came a statement from the British Embassy in South Africa welcoming the decision of the country's Coloured (mixed race) Labour Party to participate in the elections to the new tri-racial parliament.

The statement rejecting Mr F.W. Botha's new constitution, which comes into force today, will be no great surprise to the South African Premier, but it unequivocal criticism could just disappoint the British

Whitewall view was best summed up by the junior Foreign Office Minister, Mr Malcolm Rifkind, in a radio interview earlier this year, when he said: "It is not for other countries to specify what the long-term South African constitution should say, clause for clause, section for section. What we want to see is a political system which may indeed meet South Africa's peculiar needs. As long as it has clearly the support of the black majority as well as the white minority then the rest of the world could be satisfied".

But it is also an open secret that Whitewall has seen the constitutional changes as a step

in the right direction and that the invitation to Mr Botha to Chequers was meant as a conciliatory gesture.

However, the AAM and others see them as a step in the wrong direction, and want Britain instead to start a dialogue with Mr Botha's opponents in the African National Congress and the United Democratic Front.

Their entreaties are unlikely to sway Whitewall, however, as long as South Africa remains Britain's second biggest trading partner outside the United States and the EEC. Not only did Pretoria import more than £1.6bn worth of British goods last year, but Britain bought £765m worth of South African products.

Then Mrs Thatcher's refusal to endorse a condemnation of Mr Botha's policies at last November's Commonwealth Heads of Government meeting in Delhi was followed by her invitation to him to lunch at Chequers in June.

The Libya-Morocco union

The Libyans

THE ARTS

EDINBURGH FESTIVAL: Dance
European imports
fill the bill

The times are long past when the Edinburgh Festival could afford to present three major dance companies, each for a full week of eight performances. This year's quota in the official programmes was confined to eight days, divided between the second and third weeks; but that did take in three companies and, with matinées and some overlapping, added up to a dozen performances altogether, almost fully sold out.

Over the years, a policy of choosing unfamiliar productions to import has generally worked much better than the occasions when a new work was commissioned, and so it proved this year. True, the company from Thailand proved disappointing, most of its programme looking like a glossy touristic catchpenny, but the ballet companies from East Berlin and Paris were well worth bringing.

Tom Schilling's rethinking of *Swan Lake* for the Komische Oper Dance Theatre met rough handling from some critics who were apparently under the illusion that British productions are faithful to the pure tradition of *Swan Lake* as laid down by Petipa and Ivanov. Since that is manifestly untrue nowadays, I found Schilling's attempt to get back to Tchaikovsky's intentions justified and interesting, and, although Schilling's choreography is not a patch on Peter Daniell's similar effort a few years back for Scottish Ballet, his production ideas, the look and drama of the piece, are stimulating.

Rudolf Nureyev's *commedia dell'arte* programme for the Ballet of the Paris Opéra was wholeheartedly successful, especially the evocation of an eighteenth-century style in *Harlequin, Magician through Love*. The plot may be naive in its piling of one adventure upon another, but the presentation is subtle and witty. You could say almost the same of Balanchine's *Le Bourgeois Gentilhomme*, also in this programme, and both of them give marvellous opportunities for dance comedy, enthusiastically seized by Nureyev and Patrick Dupond, who alternated roles. Dupond is a brilliant dancer, but Nureyev's performances are more enjoyable because he plays more to the rest of the cast.

Opera

Biting originality

Turandot

Covent Garden

Last winter Franco Zeffirelli presented *La Scala* with a *Turandot* that had more than a touch of Hollywood: a Pearl S. Buck spectacular with pagodas shimmering in the moonlight. Such an option was hardly available to Covent Garden when they opened their new *Turandot* in Los Angeles in July. Hollywood should not be given back its own. So Andrei Serban went to the other extreme and staged Puccini's final opera as a morality — or rather, as it turns out, an immorality — tale, played before the people. It is now at Covent Garden to begin the 1984-85 season.

The populace of Peking is ranged at the back of the stage on the tiers of a mighty temple, whose doors open to reveal the rising of the moon or yet another instrument of torture. Peking in Serban's eyes, as Paul Griffiths reported from America after the first night, is a city of implacable cruelty. It is also one of exotic ritual entertainment, presided over by Ping, Pang and Pong, as acrobatic masters of ceremony in their garish costumes who call up at will a hundred persuasions, from dancing girls to masks of severed heads.

Serban keeps his real audience at a decent Brechtian distance — indeed, a stranger wandering into Covent Garden might be forgiven for thinking that he had stumbled across a performance of *The Caucasian Chalk Circle* rather than Puccini. And he is right to do so because the tale he has to stage is an unpleasant one: the price of love is death and the point is clearly made as Liu's catafalque is wheeled across the front of the stage while Turandot and Calaf sing of their ecstasies. The Serban view, with that of his designer Sally Jacobs, is clear, cogent and totally original.

There is equal clarity in Sir Colin Davis's masterly account of the score. Few opera composers were better orchestrators than Puccini, and Davis proves this in practically every bar, bringing out the full exoticism of Puccini's Chinese expedition as well as his sensuously caressing lines. The sharp blade and the velvet touch stand side by side.

Also, vocally matters are not on this high plane. Plácido Domingo as usual gave his all, but the voice on the opening night sounded under strain and the thick orchestral texture often too much of a barrier. It could be, though, that Calaf is no longer an ideal part for him on stage and he sings only one more performance here — that tomorrow night. Gwyneth Jones's Turandot is fearless, a creature of scarcely repressed passions, symbolized by the flame-coloured dress of Act II: the vocal qualities may be uneven, but the attack is all there. Helen Donath's Liu, much applauded by the audience, is a disappointment, pallid in voice and performance, and Gwynne Howell, another newcomer to the cast since Los Angeles — makes a surprisingly tentative Timur. The trio of acrobats-ministers is weakly led by William Workman; their vocal gymnastics are not on a level with their physical ones.

Turandot goes through several cast changes as the month progresses. Serban and Davis between them have created a showcase exotic enough to accommodate them all.

John Higgins

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E. J. Craddock's Publishing column has been held over for lack of space.



Rudolf Nureyev, the brightest star of this year's dance, in his *commedia dell'arte* programme

choreography (one piece, *Alhambra*, by him, the other, *Five to Two*, by her, to music respectively of Carlos Santos and Mauricio Villaveccia) was curious, with some eccentric movements, but both dance with an attractive simplicity and involvement.

Dance also turned up in unlikely places. Some masked dancers from Japan performed in Princes Street Gardens under official festival auspices.

es, well reputed, they come this week to the Bloomsbury Theatre. Franz Kline's abstract portrait of Merce Cunningham dominated the entrance to the Smithsonian Exhibition of American treasures, and I suppose the decision of the Playhouse management to paint the corridors during the ballet season could almost count as performance art. Never a dull moment.

John Percival



Plácido Domingo giving his all in *Turandot* — though the voice sounded under strain

Oberto

Radio 3

Never before has there been such an abundance of fuel for the fire of Verdi-mania. Julian Budden's 'kaleidoscopic' trilogy was followed by the recently published interviews and encounters with the composer, and now the BBC is on the act. From now until February a weekly Saturday afternoon series on Radio 3 will be broadcasting in chronological order all the operas of the man who carried the musical, social and political history of the entire nineteenth century along with him.

Julian Budden's lucid interval talks put things in context and present the evidence for inevitable niggling questions like whether *Oberto*, *Conte di San Bonifacio*, which we heard on Saturday, was really the first opera. Those who saw University College Open's British stage premiere of *Oberto* two years ago at the Camden Festival will remember the weak plot of betrayed love and paternal revenge and the strong if erratic, responses of the 26-year-old composer.

Listening on the radio, of course, the ear is less selective, the imagination less restricted. The passages of conscientious time-servings become more of an endurance test, but when the coup begins to fall upon coup in Act II, and when Verdi is suddenly turned by the potential of

Hilary Finch

2nd International Design Competition, Osaka



This international design competition seeks to clarify the role and mission of design in concretely visualising a bright future for mankind as it moves onward toward the 21st century. It is our sincere hope that the theme of the 2nd Competition "ZK" [Kou] as it relates to people, society, life, culture and all else that impinges upon us will elicit profound and enlightened projects and proposals.

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January 10, 1985 Closing date for entries for preliminary judging

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Theatre
Eerie spectacularScenes from Faust
King's

The Berlin Ensemble's production of Goethe's *Faust* could scarcely have presented more of an antithesis to the quiet clarity of their *Galileo* seen earlier in the week. *Faust* was a production with a Gothic superabundance of effect and fantasy.

Choosing to play the fragmentary *Faust*, Goethe's first transcript of the work that was to become his *Faust*, has presented the Berlin Ensemble with many obstacles to surmount. The *Urfau* (so named upon its discovery) was written during the 1770s when Goethe was still in part influenced by the *Sturm und Drang* movement. At this stage very little of the *Faust* story with which we are familiar had been incorporated in his interpretation; *Faust*'s initial yearning for experience once expressed, and his pact with Mephisto made (although not explained), Goethe goes to explore the Gretchen tragedy, a familiar theme to the era in which he was writing, without effecting a satisfactory connexion between the tale of betrayed love and the *Faust* story proper.

The Berlin Ensemble have resolved this problem. In place of the Prologue in Heaven that precedes the completed version of *Faust*, playing *Faust*'s ultimate salvation in context, they have incorporated their own prologue put together from extracts of work by Goethe contemporaneous with his *Urfau*. These they have chosen to fit the interpretation of Gretchen's inevitable tragedy.

Against the weirdly fantastical background of fragile web-like buildings, shimmering lanterns and a cosmos of overbright stars that retreat and advance, Prometheus delivers his defiant speech of individuality and freedom, then is lost in the movement's general momentum.

Despite the cut and thrust of the Scherzo and a finale that at times seemed positively Haydn-esque for all its stature and gravity, at the heart of this performance was the magnificent Funeral March. Again Wand allowed his orchestra to relax into the music with a calmness that paradoxically intensified its effect. And, without a domineering imposition of personality, once more the "Eroica" took its place on that tantalizing threshold between the eighteenth and nineteenth centuries, retaining vestiges of objective formality whilst speaking its revolutionary message to mankind. Sarah Hemming

Concerts

'Eroica' in its proper place

BBCSO/Wand

Albert Hall/Radio 3

By coincidence, on the morning of this concert I heard the opening of Günter Wand's recent recorded performance of Brahms' First Symphony on the radio. Much faster than is customary today, but nevertheless strong and penetrating, those few bars spoke volumes about the integrity of this still underrated conductor. For Wand, however individualistic his results, consideration of the music always comes first, his own ego last. That much was abundantly evident in his translucent, sparkling account of Schubert's Third Symphony which began his Prom.

Thus the pace of the first movement was finely judged to allow space for the woodwind (who had an excellent evening) and the brass to make inner counterpoints or strident chords tell with their fullest effect, while Wand's careful ear for balance ensured that the significance of few such details was

feeling and phrasing nevertheless went in eloquent counterpoint to the orchestral playing, the conductor being disposed neither to linger unduly nor to exaggerate any of the instrumental effects.

Possibly an extra desk or two of strings would have helped to intensify the music's initial sense of storm and stress, but the wind instruments were heard to telling effect both in the "Pilgrims' March" and in a lilting account of the "Mountain Serenade". The final "Orgy of Brigands", however, sounded uncommonly convivial, rather than the frenzied rout the music implies, as if brigandage had become sociable.

More exotic dreams were voiced by Jill Gomez as she sighed through the Orient of Ravel's imagination in *Scheherazade*, the hint of darker desires and voluptuous yearn-

ing imparting a richness of texture to the blend of voice and orchestra. Not all the words came clearly across, but perhaps radio listeners had the advantage in this respect. Such songs seem better suited to more intimate surroundings if subtlety of inflection is not to become too diffused.

At least Mr Downes kept the poet's dreams from being submerged, as he did the wealth of instrumental detail in the pictorial allusions of Debussy's *Nocturnes*. After making perspective the prime quality in "Nuages" and "Fêtes", the BBC Singers added their flight of vocal fancy to "Sirènes", while in *Après-midi d'un faune*, at the start of the programme the flautist surely deserved naming for his skill as well as being summoned to take a bow.

Noël Goodwin

Television
Soap-suds of sin

There is nothing, or so it seems to be believed, that the public want more than a mammoth family saga of poverty, greed, passion, wealth and corruption, especially as the nights draw in. After the first two-and-a-quarter hours of Sidney Sheldon's Master of the Game on BBC1 last night, it was apparent that the above claim could in no way be an offence under the Trade Descriptions Act.

Nobody in this first instalment — the eight-hour series continues tonight and concludes next Sunday — is slothful. That apart, the other deadly sins are there, with variations.

Dyan Cannon is the star. We

saw her first aged 18, at her birthday party in Maine. People were

being fulsome but the old lady

was thinking along the lines of

"If they only knew..." Well,

that is for you to choose, but she

has a cupboard big enough for a

graveyard of skeletons.

The first we saw was fleshed as Jamie McGregor (Ian Charleson), founder of the fortune, clawing his way up in the South African diamond fields, being swindled by our own dear Donald Pleasence, on whom he exacts a revenge by way of his daughter, played by Cherie Lunghi.

Miss Lunghi had a rotten time: left to have Jamie's baby in a brothel with Daddy having shot himself and Jamie away with the bawees. But she had fortitude and finally coupled with him on the carpet of his mansion after a good old fist-fight. Miss Lunghi played through these vicissitudes with incredible calm, though it may have been bemusement.

The early scenes were very much out of *Wide World*, and rip-roaring adventure, but the soap bubbles rose as Jamie struck it rich. Tonight they will flood the set. Jamie will not be there. He popped off with a stroke. Maybe he should have been slothful.

J. B. Priestley was celebrated three times over the weekend: last night from Central in an affectionate family remembrance by his son Tom, on BBC1 in *An Inspector Calls*, and on Saturday in a wide-ranging appraisal on BBC2 presented by Robert Robinson, Postscript: J. B. Priestley Remembered.

This last was a somewhat ragged affair, though there were some gems. The contributors included Priestley's widow (Jacqueline Hawkes), Michael Foot, A. J. P. Taylor, Malcolm Muggeridge, Malcolm Bradbury, Angus Wilson, Beryl Bainbridge, Gareth Lloyd Evans, and Priestley's publisher at Heinemann, A. S. Frere.

Mr Foot and Professor Taylor recalled his political contribution, the former remarking on his intuition about what people were thinking and the latter recalling Priestley's intention to drive the "nuclear madmen" from power just as he had been instrumental in bringing in the postwar Labour Government. Mr Muggeridge thought him not the least bit of a revolutionary: he had wanted to live in a class-dominated society, so that he could complain about it.

Mr Priestley, seen in film clips, was the most entertaining, describing his technique of choosing names for his characters from the AA book, defining the professional writer as one who writes when he does not want to, and giving his recipe for living, "by admiration, hope and love".

Yesterday afternoon's *The Elastic Church*, from Channel 4, failed to provide a kindly light amidst the encircling gloom of the current theological debate in the Church of England. Too many talking heads justified the title but obscured the trends. Dennis Hackett

This International Design Competition is conducted under the auspices of the Japanese Ministry of International Trade and Industry and with the endorsement of ICOMGRADA, ICSDI and IFI.

SPECTRUM

2024: Life after a KGB peace pact

Ingram Print

Forty years from now, history will be read on computer terminal screens. Futurologist Norman Macrae projects the story which will be read next century. In the first of a three-part series, he speculates on superpower rivalries in the last quarter of the twentieth century.

For most of the second half of the twentieth century it seemed more than 50 per cent likely that the world would blow itself up. After the achievement of nuclear fission in 1945, scientists could soon count how many hydrogen bombs or cobalt bombs would be required to destroy the planet.

Our grandfathers at this period were strangely allowing themselves to be bossed around by three sorts of excessive government, misleadingly called the "rich democracies", the "communist powers", and (somewhat contemptuously) the "Third World". Each was in a dangerously unstable state.

In the rich democracies, this was the age of limited-channel television, which was very different from the free-as-air telecommunicating computer terminals (TCs) of our time.

Under that limited-channel television, for the first time since the days of Pericles, democratic electors could regularly see and hear in their own living rooms those whom they were asked to vote for. Democracy thereby became a system of picking men with the characteristics of good television actors – that is, prima donnas skilled in dissembling – and then putting them into the kind of antagonistic work environment which would turn a poodle into a paranoid (listen to the tapes we still have of the 'dailies' shouted question times in the British House of Commons).

The rulers who emerged through this system were then allowed, amid an atmosphere of power and egomania (but also occasional appalling unjust personal slander), to spend half their people's money for them, until somebody heard some tape of what they had been saying casually to their own staffs in private, when there arose a great clamour to put them in prison instead.

And this was the most civilized of the three contemporary systems of over-government. In 1984 it applied to about 40 of the 165 governments of the world. In most of the 125 non-democratic countries the head of government went to bed each night in some way afraid that he might be killed together with his family in a coup d'état before breakfast tomorrow morning. This did not lead to a relaxed frame of mind in what was to become the nuclear trigger-minders' profession.

The first nuclear power among what might be called the coup-d'état-territory states was communist Russia. It was thus the first power that looked as if its system of neurotic over-government might destroy mankind. It was also the first to

disappear, and it is interesting to see how this came about. The Soviet Union's main destabilizers were the growing sophistication of East Europeans, the lack of market mechanism in communism, and the lower birth rate of European than of Asian Russians from the late 1960s on. Since under communism there was no direct link between increased demand for anything and increased production of it, particular shortages always appeared of the things that were most especially wanted. Higher supplies of these scarce things were then divided into the special shops from which only the privileged were allowed to buy. This increased both inflation and queuing for ordinary Ivan.

When a second wave of Solidarity-type revolts spread across East Europe in 1988, neither local nor European Russian troops were willing to

enforce martial law to put them down. Soviet conscript soldiers had been happy to crush the Prague spring in 1968, which they regarded as a rising of dissident middle-class wets. But by 1988 a lot of young, poor-white, rather racist European Russians resented being called up to be bossed around by the many 25-year-old Asian-Russian corporals, whom the European conscripts regarded as the uppity elder brothers of the drug-pushing, teenaged Asian muggers then flocking into Moscow (because teenaged girls were being locked away from any sexual promiscuity in their suddenly more religious Soviet ex-Muslim areas back home). In Lodz in 1988, European Russian conscripts refused an Uzbek sergeant's order to fire on violently striking Polish coal miners, especially as coal strikes were now starting in European Russia itself.

Some mutinous soldiers fraternized with the Poles. Reports from commanding officers spread panic among the 1 per cent of priviliege who ran the Soviet Union: "Some soldiers now eager to help overthrow the Polish socialist regime rather than protect it... danger of soldiers shooting their officers and bringing back guns to Mother Russia to murder the local priviliegenzia in their scattered home towns as in the Tsars 1917."

President Chernenko had been a feeble old man when he acceded in 1984, and by 1988 he was a feeble and older one. A

Borovsky had already outlined the three main flanks of his intended policy in his letter to Bush:

"1. It is going to be very easy to make the Russian economy boom. The situation (hopeless over-demand, near-total reliance on black markets) is most analogous to that of West Germany in 1947. West Germany's economic policies then have been much studied here ever since economics became a matter of playing games with computer models. We recognize that when West Germany dashed into free markets after 1948, it dashed all the way into becoming one of the richest and most societies on earth; the Germans under the Bonn Government have behaved better than Germans have done for centuries. We in the Soviet Union are more educated than the Germans were in 1947, have a more advanced scientific base, and can emerge through the problems immediately ahead with higher morale than 1947 West Germany. Our group is determined to dash for economic freedom as dramatically as Erhard did; no half measures like the Hungarians and Chinese tried, which don't work."

He was interested in little else except his beloved machines, but learned English because most contemporary research was reported in that language. He went first to work for a merchant bank in Switzerland, and then telecommuted from there to one in London. In 2006



When the 17 successor states of the old Soviet Union and the six former East European satellites joined North America, West Europe and Japan in the new northern OECD in the 1990s, over 50 per cent of the labour force in these rich countries were already white-collar workers. Life for these white-collar workers was about to be dramatically changed by the twenty-first century's distinctive transport revolution. The free-as-air telecommunicating computer terminal, universally known as the TC, had very different effects from the twentieth century's suburb-creating transport revolution

(the automobile) and the nineteenth century's United States-creating transport revolution (the railways).

With telecommunications, cost did not depend on distance. White-collar workers from North America and Europe could by 2005 go and live on the beach at Tahiti if they wanted to, and telecommute daily from there to the commanders in the New York, London or Timbuctoo tax haven office through which they worked.

Throughout most of the twentieth century democrats had pretended to each other that they could significantly alter their lifestyles by voting on one

Tuesday or Thursday every four years whether Mr Reagan or Mr Mondale, Mrs Thatcher or Mr Kinnock, was putting on the tribal demonstrations which at that particular moment annoyed them less.

After the advent of the TC they found that the most sensible and direct way in which a free man could choose his government was by voting with his feet. The individual could go to live in any area where the local government permitted the lifestyle, rules and customs that he liked.

Sometimes these very local governments were hotel complexes in which

nobody had a vote; if you didn't like the lifestyle, you moved out. Sometimes they were communes in which everybody had a vote; they often voted to do things that were very odd. Now, in 2024, they are often governed by computerized insurance contract. If your family does things which cause damage or distress to your neighbours, you get warning that your insurance premium for living in that neighbourhood unit is going up. But most people rifle regularly through the computerized video programmes on their TCs to examine the many alternative lifestyles on offer across the globe.

"2. When my group assumes command I will send an official message to you, with drum-beats. "Our policy is absolute on one matter: no revenge for the past, because men have been doing what they deemed to be their duty." We can arrange the wording in advance so as to make it politically convenient for both of us.

"3. A big remaining problem will be the poor two-thirds of the world, where over 100 unbalanced and quarrelsome dictators may soon have nuclear bombs to throw around. My guess is that Russia and

America together will have to revive gunboat diplomacy against them, and we will probably disagree on who is the worst lunatic to leave ruling which banana republic where. At least five Latin American states I have frankly thought that the unpleasant would-be dictators whom we in the Soviet Union have been financing would be less bad for their unfortunate people than those whom you have been financing."

Most of the things which the Borovsky Letter advocated came to pass. This has been obscured by modern historians because of the eventual disappointment about Borovsky himself. When he emerged into the West out of his bloodless Russian counter-revolution of 1989-90, he was no hero on a white horse. He was a laud and nervous alcoholic, clearly an embarrassment in the ranks of the rather impressive Berisov Government which signed the Treaty of Friendship with the US in 1991. He committed suicide in 1995. After his death stories began to appear of the horrors that Borovsky had committed while a KGB official. This book will not demean itself by casting judgement on that. For the first 46 years of his life he played the usual role of a tense but intelligent young member of the old Soviet priviliegenzia. During his last seven years he played his part heroically.

He delivered us.

The author is deputy editor of The Economist. Extracted from The 2024 Report: A concise history of the future 1974-2024, published on September 6 by Sidgwick & Jackson, £9.95.

Pickpocket millionaire of the telecommuting age

Giovanni Varchi (1982-) was born in a small town near Ragusa in Sicily. His father had been working in a small family business in Sicily, but moved to become a factory worker in Milan when employment picked up there at the end of the world mini-recession in 1985. Giovanni had, like so many children of his age at that time, become fascinated by the new technology, and he retreated from the difficult social world into an intimate and almost obsessive relationship with a series of personal microcomputers.

He was interested in little else except his beloved machines, but learned English because most contemporary research was reported in that language.

He went first to work for a merchant bank in Switzerland, and then telecommuted from there to one in London. In 2006

Mr Varchi learned to his distress that the 24-year-old Giovanni was back in his native Sicily. He was running his own telecommunicating company, which was nominally consultancy. He was its only employee. On the surface the company did very little business. It made very modest profits considering the amount of capital which was tied up in its computers. Actually, Giovanni Varchi was by now a multi-millionaire. He had hundreds of bank accounts in different foreign cities, none of which he had ever visited. Most of his money was invested in securities which brought in an income of tens of thousands of dollars per week. This was augmented by an even greater inflow of cash from other sources. Giovanni Varchi was one of the most successful thieves of all time.

He had achieved this distinction by

covering his tracks so well that it usually could not be detected that a crime had been committed, let alone how or by whom. He began by finding ways to eavesdrop on other people as they used their computer terminals. Then he would find a non-obtrusive way of removing money to his own accounts. Always he would do this in moderation, creating a small leakage for a short period of time. Always he would cover his track by amending records so that it was impossible at a later date for anyone to see how the money had been re-routed.

Varchi's distinction is that he was not the telecommuting equivalent of a bank robber, but rather the telecommuting equivalent of a pickpocket. It is probable that nobody has ever committed quite as many individual acts of theft as Giovanni Varchi.

Tomorrow: The global bank takes over

CONCISE CROSSWORD (No 435)

ACROSS	1. Low and throaty (5)	4. Pop band follower (7)	8. Governor (5)	9. Laborious (7)	10. Suffer deprivation (8)	11. At this place (4)	12. Like bad dream (11)	17. Cloth scraps (4)	18. Sweet smelling (8)	21. Result (7)	22. Soft pedalled (5)	23. Inhabitant (7)	24. Courage (5)	DOWN	1. Bubble (6)	2. Polish lancer (5)	3. Sullen (8)	4. Passing helper (4,9)	5. Comply with (4)	6. Greek sea god (7)	7. Resurrection festival (6)	12. Middle East guide (8)	13. Innate (7)	14. Camera stand (6)	15. Change (5)	16. Steamed pudding (6)	17. Interrogative (4)	18. Recommended dictionary is the New Collins Concise

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After a monumental bureaucratic blunder at the GLC it seems that part of London may be shipped abroad before the end of the year.

What happened was that the Greek government made one of its periodic requests for the Elgin Marbles to be shipped back to Athens. These requests come about once a month and are routinely turned down by the government: the GLC, on the other hand, always agrees with the Greek request even though it has no jurisdiction over the marbles.

Recently, however, a temporary translator on duty at the Foreign Office mistranslated the phrase for Elgin Marbles (which she had never heard of) as Elgin Crescent (a street in Notting Hill which she knew well). A less than attentive GLC official later signed assent to the Greek government request, and now the GLC has found itself in the strange position of approving the return of Elgin Crescent to the Greek capital.

No doubt this order could be rescinded by the GLC, but the machinery has already been set in motion to carry out the move, which some people think no crazier than some other GLC decisions – and a budget has been set aside for it. More to the point, there is considerable feeling among the residents of Elgin Crescent that the move might not be half a bad thing.

"It would be a lot warmer, for a start," says one old age pensioner. "The doctor keeps saying I ought to get abroad during the British winter. There's no way I can afford that. But if the GLC is going to move us to Greece free of charge, well, I'm not going not going to say no. I'd miss the Portobello street market, mind you, but I expect they've got veg in Greece like everywhere else".

The shops in Elgin Crescent are divided over the move. The classy delicatessen can see the advantage of not having to import Greek foodstuff any more but the bookshop would not take kindly to having to restock entirely in Greek books, especially as the different alphabet would play havoc with

the microfiche set-up. The big pub on the corner, though would go down a treat in Greece, as there is a dearth of good old-fashioned pubs in Athens.

"What the situation would be over licensing hours is a tricky one," says the GLC defensively. "Presumably they could follow continental hours if they liked, i.e. open day and night but I think the publican should be free to keep English hours if he felt like it. Could be a tourist attraction, actually – I mean, very few Continentals know the delights of being chucked out at closing time and it could be a big draw. I think we'd have to draw the line at dancing on the tables, though. Do they have carnivals in Greece?"

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Mary Gurnane

MONDAY PAGE

There is talk of betrayal in the air. Listen to this man described in the current issue of *Ms* magazine: "He sees himself as a feminist who always supported female goals of equality in the workplace. But he does not want to revise his own life plan - no marriage, no children - because the woman in his life is 'falling back' on traditional choices."

The woman in his life, as you have gathered, wants to have a baby or, to put it in the chap's own words: "She's cheating herself by giving up on her career."

It seems only yesterday - it probably was - that women were the ones who felt themselves at the business end of a betrayal. They moaned that they had given up everything for *Him* - job, career prospects, the easy-going life of flat-sharing and blind dates. And now that they were stuck in the suburbs with the playgrounds, the gerbils and the new baby, *He* was unfaithful, or wanted a divorce or separate holidays.

Times changed. A lot of women began to read a lot of books advising them how not to become their mothers, otherwise known as the generation of self-made martyrs. So they didn't. Instead they became half

'Me earthmother, you breadwinner'



PENNY PERRICK

of a dual-career, housework-sharing family.

Their role-model was the lawyer played by Meryl Streep in the film *The Seduction of Joe Tynan*, who fixes a mutually convenient meeting with her husband by asking him to "get your girl to call my girl."

No one had to make any sacrifices, for one had to give up anything for

anybody and, with two incomes rolling regularly into the bank, everyone concerned could afford to indulge their taste for Sancere, designer clothes and holidays in Mauritius. Being married became as much fun as not being married.

Only now, this current crop of equality-minded husbands seem to be saying, women are beginning to spoil it all. Having fought for the right to be allowed into the wonderful world of working men, they are now asking to be allowed out again. "Me earthmother, you breadwinner", is their turncoat message, hardly music to the ears of men, who have grown accustomed to watching the dishes, but not to paying the mortgage all by themselves.

So what are their feelings when their wives start demanding that old female privilege of being allowed to change their minds? Jealousy and resentment, according to *Ms* magazine, and who can blame them? "I keep thinking that she has the choice of staying home or going out and working", said one of the interviewees.

The tone sounds familiar. It is the peevish one that women once used when they felt that only men had any choice in how they lived their lives. "It's all right for *him*, he's not stuck in the house with the kids all day." Or, "I keep thinking as I open the tin of macaroni cheese for lunch that he's probably treating himself to a telephone and the latest account from the garage."

These captive wives resented the inequality that marriage forced on them. A generation later, their sons are beginning to voice their own protests about the problem as seen from their side.

Like Lorelei, women who want to "fall back" will no doubt start working on menfolk. "Wouldn't it be nice?" they will ask enticingly, to come home to a lovingly prepared casserole, ironed bed linen, a glowing fire?

This may not cut much ice. Had their husbands wanted a girl just like the girl who married dear old dad they would have gone out and tracked one down years ago. By now they are far too spoilt to appreciate the good

things in life - only the absolutely perfect things will do.

They don't want home-cooking, they want to dine nightly in good restaurants and to be able to sign the bill with an easy flourish, knowing that their wife's pay check will take care of the central heating, the telephone and the latest account from the garage.

They don't want fireside domesticity. They want to be able to go to all-night parties or late movies without the fuss and bother of organizing a baby-sitter.

This contemporary dilemma will take some working out. I suspect that it will be the women who make all the moves - promising that a baby won't make any difference, running themselves ragged by going back to work too early afterwards and from then on attempting a precarious balancing act of tending husband, child and job. It will turn out to be a life full of sacrifice, similar in spirit although perhaps not in kind to that of their mothers.

• Who is it that supplies people's names to the compilers of mailing lists? Banks? Credit card companies? Department stores? Whoever it is, is not playing fair, for my name was supplied to The Campana Finishing School of Farnham, Surrey, and I hope the school didn't pay out good money for it.

TALKBACK

Doctors in need of treatment

From Anne Ashley, Timmy-Hoggy House, 49 Godstone Road, Purley, Surrey.

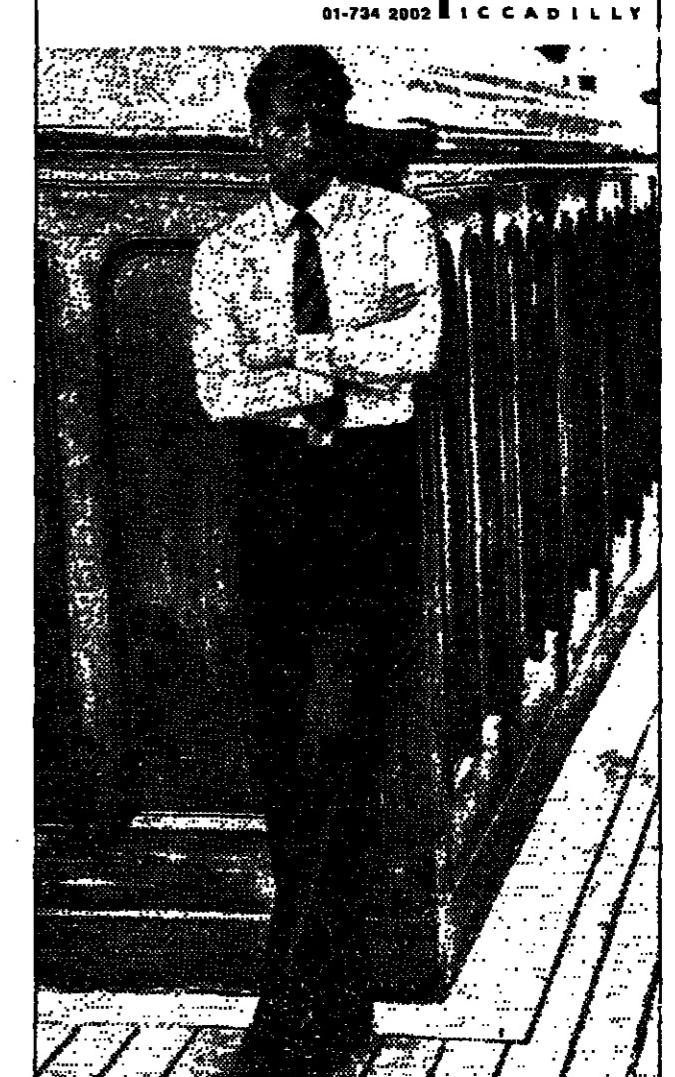
What a curious muddle the medical profession is in. Dr Stuttaford (August 18) declares that the parents of babies who are born with life-endangering congenital heart conditions are not in a "fit emotional state for the necessary detailed discussions" and, further, "thus he states the orthodox medical opinion that only doctors are endowed with the ability to make decisions about experimental surgery or any other kind of medical interference on other people's children. He implies that doctors are in a "fit emotional state" to make these decisions. But the rigorous exclusion of any form of discussion or encouragement of emotional growth within the training process of doctors and nurses must surely lead lay people to question this extraordinary and arrogant assumption.

Further, it appears that, when there are no exciting and adventurous surgical decisions to be made, parents are paradoxically expected by the same profession to be able to make complex decisions and to cope with handicapped babies quite as a matter of course and usually with no guidance, empathy or even minimal understanding from doctors and nurses who have been trained that caring attitudes diminish their expertise.

Recently a new born, handicapped baby disappeared. The parents of this baby, as the parents of all such babies, were under enormous stress and, in this case, there was no possible treatment. The experiences of similarly distressed parents leads one to conjecture that, in this case, there were no "detailed discussions" about the strength of the marriage or whether the parents would be able to cope. It was simply assumed that they would.

The medical profession must not be allowed to pick and choose which patients it should make decisions for. Indeed, it would be a great relief for patients if the profession would study the whole process of "making decisions" and this is underlined by the recent disquieting reports from several ombudsmen. Nor should this society continue to train doctors who believe that without any understanding of emotional dynamics, they have the arbitrary power either to make unilateral decisions about people's lives or when there is no medical action possible, to withhold consideration and concern.

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Young Children Learning, by Barbara Tizard and Martin Hughes, is published by Fontana on September 18, price £2.95 paperback.

Open daily 9.00 am to 5.30 pm, Thursdays 9.00 am to 7.00 pm.



FIRST PERSON

Music to my ears on the Tube

I heard it as I stepped off the escalator at Holborn, en route for the Piccadilly line. I looked around for the source of this heavenly sound, a sound as unexpected as it was delicious, then realized it came from a busker who stood some yards back from the bottom of the escalator. The busker was female. Her eyes were closed as she played the solo accompaniment to Mozart's flute concerto. The part of the orchestra was supplied by an enormous stereo transistor/recorder.

In front of her was spread out a piece of sacking on which were a few coins to which I added 10 pence.

"What a pleasure it is to hear you play," I said.

The busker nodded and went on playing, opening her eyes a slit in acknowledgement of the 10 pence, the appreciation, or both. On the way home I passed a male busker playing the solo accompaniment to Brahms' Violin Concerto. I gave him 10 pence too and wished I had time to stay and hear more.

As I hurried on, it occurred to me that I, and all the other commuters, did, in these circumstances, have the choice, that this was one of the rarer forms of unsolicited music and therefore much to be recommended - in that it gave people the option whether to listen or not.

When I go to the hairdresser, for example, I am subjected from the moment a gown is draped around my shoulders to the moment I pay the bill to the high decibel, and for me unwelcome, jingles of Radios One, Two or London. No one has ever asked if I, or any other client, want this diversion.

It is not only annoying because it is less attractive to me than Brahms or Mozart, since I accept that either of them could be equally irritating to some folk as the sound of Boy George or Michael Jackson is to me; it is annoying because one cannot escape from it.

There are stores from which one feels excluded, though the stock be seductive, because a transistor has been turned to maximum volume and the music is alien.

It is this alienation that I think is most irksome. We are divided not by age or class but by obligatory noise, natural to some, loathsome to others.

Whether it is the majestic cadences of *Traviata* or the simple philosophy of "When will there be a harvest for the world, yeah, yeah, yeah", it is not improved by being played *fervissimo*, nor when there is no prospect of getting the volume reduced.

I have been a guest at weddings and other functions where the band or disco has been so loud that all attempt at communication with fellow guests had to be abandoned.

In public places there is usually a preference for the amplified beat of guitar and drum accompanied by frenzied vocalization. Maybe it is lyrics like "Wanna be startin' somethin'" or "Gonna gun even, baby", plus the car-bursting head-splitting tumult that make it all seem threatening.

Which is why it gave so much pleasure to hear Mozart's Flute Concerto No. 1 in G Major played by a busker in London's Underground. And when I heard Brahms being celebrated on the same day I began to wonder if it is the wind of change that whirs through these corridors. I do hope so.

I am sure I could tolerate music of this enduring beauty in the hairdressers', even with the pitch turned up, though I would still rather be asked if I minded and have others asked if they minded too. Goodness knows I have often longed to march up to the transistor and ask its owner, with a touch of acid in my voice as I turned the volume knob and clockwise: "Do you mind?" But that is not quite the same, is it?

Mary Bourne

Mothers can give their children a better start than nursery schools, as Colin Hughes reports

Why child's play teaches best



Important homework: Barbara Tizard and co-author Martin Hughes, who found nursery schools far less effective than learning at home

Child psychologists have long subjected mothers and children to artificial tests in cold and strange surroundings to reach the conclusion that special play programmes and tactical questioning are the best way to stimulate the pre-school mind.

It has taken Barbara Tizard, professor of education at London University, and Dr Martin Hughes, a research fellow at Edinburgh University, thousands of hours listening to and recording children's conversations in the home, to reassess what many mothers know is commonsense: they are their child's best teacher.

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The findings will soon be published in paperback*.

When Dr Tizard and Dr Hughes compared kitchen conversations with nursery school conversations, it was clear that not only do mothers consistently satisfy their puzzling progeny, but children were fully able to follow logical thoughts through to intelligent con-

cclusions. Some bright four-year-olds showed powers Dr Tizard believes many teachers would think impossible.

Even family rows about domestic issues taught children complex facts about their wider social world, from wage earning to why we have to take other people's characters into account. They debated why the Queen wears no crown, why vets kill animals and extended their vocabulary way beyond what they displayed in the classroom.

Parents rarely asked questions, or challenged their teachers and only replied with reluctance. Despite all the children having attended nursery for at least a year, they only had an average of ten conversations an hour with their teachers.

At home mothers kept up an astonishing average of 27 and hour. Besides being twice as long as the school talk, many were also what Dr Tizard calls "passages" of intellectual search: conversations in which children doggedly sought successive answers until they resolved confusion over a problem that might have been worrying for days. Not one such conversation was recorded in school.

Dr Tizard chuckles: "I don't want to mislead anyone into believing that children can understand everything. Of course they can't. I can never forget when my own son, aged four,

wanted to know what the word *spoon* meant. He had been told it was a long-handled spoon for stirring porridge.

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about four, heard me describe a man we had seen as walking along with eyes on the ground. My son looked up at me aghast. He really believed that the man's eyes had fallen out and he was trampling on them.

Every mother has amusing tales to tell like that. The strange thing is that teachers don't seem to remember what their children were like."

Despite all this, many mothers remain overawed by professional wisdom. Anxious to give their children a head-start, they continue to hand over children to the professional educators as soon as possible. The researchers found no evidence that school gives even working-class children any advantage. Those teachers who are not automatically urging parents to come into the nursery should consider whether they might not learn more by following the child home and watching mother at work.

Naturally mothers start a length ahead, with a long history of shared experience and the chance to enjoy tête-à-têtes with their child. Only 11 per cent of British families have more than two children aged under 16, so the pupil-teacher ratio at home is nearly ideal.

That said, nursery schools are still obsessed with the idea that play is the only way a child can learn fruitfully. The book suggests that open-plan schools

apply themselves to tasks which bear some meaning, devise ever more devious toys to stimulate them. At home the same children are bathing babies, drying dishes, tidying floors, and developing skills because they feel an impelling need to emulate adults.

What most impressed us was the children's amazing intellectual power, their passion to understand. And by and large it is the parents who provide the answers", said Dr Tizard. Even mothers who complained that their child's constant quizzing drove them to frenzies of frustration delivered what the child demanded. No nursery teacher could hope to keep that up.

Story-time turned out to be far from the cosy idyll popularly portrayed. Most mothers used stories as a ruse to win peace with fractious offspring on a trying day. None the less, sessions which started fraught with tension rapidly turned into gay chatter. At school, in contrast, a circle of children seated round a teacher passively listened without seeking out reference in the story to their own experience.

As the inserts show, children who are alert at home can appear dull at school, particularly those from less well-off families. The coverstamps have, in fact, led Dr Tizard and Dr Hughes to believe that working-class children are not educationally deprived, but overawed by school, and so seem subdued. Teachers conclude they are intellectually immature, and a vicious circle begins.

Dr Tizard believes that the deprived children are those in large families whose siblings do not talk to them, or isolated homes, where mothers have not the time to talk, or the child with no opportunity to follow the events of an adult day.

Dr Tizard expects parents to scour their books for clues on child-rearing. "It's a pity, because the point is that parents can relax. All our work shows that, whether they try or not, the child goes on learning. Nor is there any reason why this mother-child relationship should go on for hours a day. We just want people to realize that the quality of learning at home is so high, and that schools are far from effective".

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THE TIMES DIARY

Friends in need

Has Robert Maxwell, self-confessed admirer of Mrs Thatcher and advocate of the "sensible left", sold out to the Russians? Frank Taylor, one of the *Daily Mirror* staff whom Maxwell controls so vigorously has just delighted the Kremlin when he publicly appeared alongside Soviet officials at a Moscow press conference marking the end of Friendship '84, Russia's answer to the Los Angeles Games. Taylor, representing the International Association of Sports Writers, lent support to the Kremlin by condemning American "chauvinism", misuse of drugs, and biased television coverage at LA. Taylor said it was "a pleasure" to have attended Friendship '84 and to have taken part in a seminar with Third World athletes which had expressed "solidarity" with the Russians. After the press conference, Taylor asserted that the LA games had been reminiscent of the Nazi Olympiad in 1936 - a charge frequently made by the Soviet media.

Taylor's tab

By resigning as Monday Club vice-chairman in May, Southend MP Tedd Taylor was thought to be publicly distancing himself from that controversial right-wing body. In private, however, he retains his eyes and ears on its executive. Recently elected to the post of national meetings secretary was Laurence Vince, Taylor's research assistant.

Good lead

War-war, jaw-jaw, now paw-paw. Liberal MP David Alton flew to Romania for the 40th anniversary celebrations of its liberation from fascism last week with specific instructions from David Steel to ask after President Ceausescu's dog. He did. Ceausescu was delighted, and to the goodwill thus engendered Alton largely attributes the success of his appeal to release from prison the dissident Romanian priest Gheorghe Calou. The dog, I should explain, is the son of Steel's own black Labrador Jill, and was given to Ceausescu after the Liberal leader's visit in 1981. As a puppy it was flown first class to Bucharest in the company of a Romanian embassy official, whisked by black limousine to Ceausescu's country retreat, and named Gladstone - after the earlier Liberal leader who almost alone among European statesmen supported the right of Romanians to form their own country during the Balkan conflict.

Pithy poster

Gerry Adams addressed a fringe meeting at last year's Labour Party conference; this year, predictably, the Federation of Conservative Students retaliates. To launch its counter-campaign to the troops-out movement, the FCS has invited the Rev Martin Smyth, Unionist MP, Grand Master of Ireland's Grand Orange Lodge and prime IRA target, to address a Tory conference meeting. The campaign - "Loyal Ulster - For Ever British" - has as its centrepiece a poster asking the difference between Adams and Ken Livingstone. Answer: Red Ken only puts holes in other people's pockets.

Flight connexion

Manchester International Airport's apologetic press advertisements about the Civil Aviation Authority's plan to hand British Airways' European routes to the independent airlines has surprised some aviation experts. Surely free enterprise would attract more business? Still, I suppose the airport's chief executive, Gil Thompson, knows as well as any about BA's merits. Before taking up the post in 1981 he was the airline's general manager for the north of England.

BARRY FANTONI



"Oh dear, another evening with grandfather reminiscing about what he could buy for 1½."

Bad taste

You don't need to tell an Irish joke to send an Irishman into spasms. Ask Unigate. It has just been damned for publishing a children's joke book, *Watch Out! The Hungryires Are Back*. Its offence? To tell some juvenile cannibal jokes - (sample: what do cannibals play at games? Swallow my leader. Am I late for supper? Yes, everybody's eaten) - and to depict cannibals as black. Swift to berate Unigate were the Celtic League and an Irish group in London; protests followed from London Against Racism and the black community paper, *New Life*. Why not depict cannibals as white when we know that Royal Navy and British Merchant seaman have also indulged, asks the paper. Unigate's unfortunately named Eric McFly feels suitably chastised.

PHS

Take a hard line on hard drugs

by John Pearman

The average price of drugs in and around the video arcades, coffee bars and discos of North London is £5. Perhaps four out of 10 local teenagers have that sort of money in their pockets on a Friday or Saturday night.

It offers them the choice of a "hard" drug of addiction, such as heroin or cocaine, in the shape of a thumbnail packet wrapped in aluminium foil, or a "soft" drug, such as cannabis, which comes similarly wrapped but is twice or three times larger.

The lack of differential in price, and the fact that the less bulky powder-mixes of heroin or cocaine are more easily concealed or disposed of at short notice, can often favour the hard drugs.

One intelligent response to this problem has been last year's Home Office guideline to chief constables. It suggested that first offenders found with small amounts of cannabis for their own consumption might usefully be cautioned rather than charged.

According to Nottinghamshire's chief constable, Charles McLachlan, 42 people received such cautions in his county in 1983, and not one re-offended. Were an imaginative policy of this sort to become nationally established, police and courts alike would have more time to deal effectively with the more threatening narcotics, heroin and cocaine.

The recent figures reporting heroin seizures by the Customs and Excise outfit

directorate are alarming. In 1980 the catch was 38 kilos; in the first six months of 1984 the figure was 400 per cent higher at 193 kilos. Faced with data of this magnitude one can understand why Mr Peter Cutting, the Chief Investigation Officer, has announced that he is retiring early.

Quite what the effect the 12 per cent reduction in customs officers over the same period has had on seizures is not clear. Public expenditure cuts removed 800 trained personnel. To Opposition spokesmen such as Michael Meacher and Robert Kilroy-Silk the recent appointment of 60 additional uniformed officers is seen as an admission of culpability by the Government. It would be unfortunate, however, if the drugs problem became a narrow party political issue. What is needed is a strong and harmonious cross-bench initiative in school health education.

Alarming though the heroin figures are, it is the ready availability of cocaine which is likely to pose the greatest problem in the next two years for our juvenile health services. Traditionally, the main coca harvests have been restricted to Bolivia and Peru, with the raw materials going to Colombia for refining and distribution. Three-and-a-half years ago, however, Colombia too started planting coca. The maturation cycle of the new bushes is now

reaching term. Predictably, Bolivia and Peru have increased their own domestic production to compete with the newcomers.

There is likely to be a cocaine glut in the USA and Europe within a year to 18 months, which will make our current problems with heroin appear minuscule. The 600 per cent increase in cocaine seizures during 1983 announced by the Customs and Excise in January did not, of course, include this new Colombian product not yet on stream.

Imagine the scenario at street level when cocaine becomes hyper-abundant, probably in the second half of next year. The price per fix may drop as low as £2 to £3, half the cost of heroin and cannabis. Three-quarters of our teenage population will be able to afford this. What proportion may be tempted to take the risk?

In 1903 the Coca-Cola Company, anticipating proscriptive legislation, reformulated their beverage by eliminating the cocaine content. Unless Mr David Mellor's inter-departmental drug unit is mobilized very soon, in 1985 Britain's youngsters are going to put the hard drug back into their favourite soft drink.

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The author is headmaster of Friern Barnet Grammar School, North London.

Ian Bradley reports from Berkeley, once the centre of the student protest movement, but now a stronghold of conservatism and conformism

Berkeley, California

The campus which cradled the student protest movement of the 1960s and 1970s has become a stronghold of conservatism and born-again Christianity. New students enrolling at the University of California, Berkeley, are sporting "Re-elect Reagan" badges and are joining evangelical religious groups in record numbers.

Berkeley's transformation in the last decade dramatically illustrates the changing mood of American youth which is likely to be a significant factor in ensuring Reagan a second term in the White House. National opinion polls show a clear Republican lead over the Democrats among those aged 18 to 25.

A recent survey of the Berkeley campus suggested that as many as 50 per cent of students intending to vote will support Reagan. A poll taken after the 1980 election showed that he received less than 20 per cent of the student vote.

The Republicans are the biggest political group at Berkeley, with 220 paid-up members - a 300 per cent increase in a year. A stall set up in the Sproul Plaza outside the student union has been doing brisk business in the first few days of the new academic year, signing up new members and giving out Reagan-Bush badges and stickers.

Other stalls to attract the attention of new students are the Campus Crusade for Christ and a booth where you can sign up for an American Express card. There is no sign of a Democrat stall, while the more extreme left-wing groups of yesteryear seem to have given up hope and deserted the plaza.

Ironically, it was the issue of whether students could erect stalls on Sproul Plaza and canvass support for extra-campus causes which touched off the first wave of student protest at Berkeley 20 years ago this autumn. The so-called free speech movement began a decade of anti-war and pro-civil rights agitation which made the University of California synonymous with student activism and revolt.

Today the mood of the students could hardly be more different. A survey of last year's freshmen found that only 15 per cent had ever taken part in a political demonstration and only 9 per cent expected to be involved in student protest. By contrast, 70 per cent had attended a religious service within the past year and 92.5 per cent expected to take their degrees and go on into regular employment.

Pressure to study and get a job is seen by many as a big reason for the new conservatism of American youth. In the words of David Rosenthal, a 24-year-old law student and member of the student senate at Berkeley: "The days when you can wave signs all day, study only three days before finals and get a job with an English degree are gone."

There are people who quarter the landscape spotting wild flowers in much the same way as bird watchers watch birds. It is a passion like any other, and like any passion, it generates words enough, for a start, to have filled 400 issues of *Wild Flower Magazine* and to have accounted for the definitive flora of 16 counties in the past 20 years written by members of the Wild Flower Society, of which the magazine is an offshoot.

The summer issue, No. 400, is a sedate 40 pages worth bound in green; the autumn number, as is the custom, will be orange-brown, and yellow will prevail next spring.

Letters from the editor and from the president of the society reflect on the 87 years of publication and on the history of the society, which will celebrate its centenary in 1986.

Mrs C. M. R. Schwerdt (nee V. V. Dent), is only the third president (and the third Dent to hold office) since the society's foundation. She quotes one of her mother's Editor's Letters, written in 1935: "It is interesting to think that when the Wild Flower Society was started there were no aeroplanes, no motor-cars, the ordinary person seldom travelled and it was considered 'fast' to ride a bicycle! One frocks trailed on the ground and we wore flannel petticoats. What handicaps to flower-hunting and how limited our opportunities..."

The early magazines, she recalls, were largely written for children, with simple articles about flowers, competitions, short stories, but "numbers grew apace, with more



Vietnam demonstration at Berkeley in 1969 - scenes of armed guards on the campus became common

Make money, not revolution

After their brief flirtation with idealism and "dropping out" in the 1960s and '70s, students seem to have returned to more traditional and competitive goals. The freshmen's survey found that more than two thirds of respondents listed "being well-off financially" and "raising a family" as their main aims in life. Deb Dunlop, who runs a multi-denominational chaplaincy and counselling service just off the Berkeley campus, says: "There's a tremendous emphasis on making it, on having a comfortable lifestyle. It's essential to stay in school and get a good job and make money, compared to 10 years ago when they cared about the environment and Viennese".

One result of this new mood has been a switch to more vocationally oriented courses. The proportion of undergraduates reading social sciences at Berkeley has dropped from 20 to 14 per cent in the last 10 years, and of those doing humanities from 10 to 7 per cent. There has been a marked increase in those studying engineering (up from 7 to 10 per cent and now the biggest single undergraduate subject), business and computer sciences.

Professor Charles Muscatine, Professor of English, who has been at the university since 1948, thinks that the students are politically and socially more conservative than at any time in the last 30 years. "It has a lot to do with the search for security and jobs," he says. "But I think also that American kids are less mature in all respects than they used to be. They think less, they certainly read less and they are less critical in all respects."

The current editor, a Mr Wilson, of King's Lynn, Norfolk, carries on this tradition of serendipity with "a true, but completely unbotanical, tale" in his Notes and Comments column. He had been cleaning out his stove with a vacuum-cleaner, "emptying it afterwards. I noticed what appeared to be a tail hanging out of the end of the tube. I pulled, and out came what I thought was a dead mouse..." There were, in fact, two of them, wood mice, with large black eyes and reddish-brown fur, both jet black from the soot, and both very much alive. "How they managed to survive the scorching soot, I can't imagine, for I had not turned the stove out first. They must both have been living happily in the vacuum-cleaner bag until this holocaust hit them."

A very long-running series on other natural history societies - this is no. 104 - deals in this issue with

Significantly, the new clean-cut, born-again, physically fit conservative image is being reinforced by many of the immigrant groups who are now coming into American colleges in large numbers. "They are often more oriented towards success and more traditionally conservative than whites", say Muscatine. Pat Hayashi, the student services administrator at Berkeley, says that students from ethnic minorities who in the '60s would have aligned themselves with Third World liberation fronts are now forming black fraternities and sororities and ethnic houses. "Now we have 'preppy' blacks and Hispanics, many from private school backgrounds and socially very conservative."

For many young Americans, relatively unconcerned with the issues of conscience that stirred previous generations, Reaganism is attractive because it offers security and prosperity. This summer the campus placement centre at Berkeley which finds part-time jobs for students had 30 per cent more jobs on offer than last year, a clear result of the improving national economy.

During his time as Governor of California, Ronald Reagan found the students at Berkeley a constant source of irritation. In the coming months he is likely to find many of them willing to work and do their duty.

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sorority the fund finds not at all amusing.

In "The Thrill of the Find", two members recount their adventures in successful pursuit of *Hannanbyra paludosa* ("not seen in the country since 1863") and the slender hare's ear ("Almost too excited to eat, we had our picnic tea..."), respectively.

This follows the third instalment, apparently, of a very knowledgeable look at "British and Irish Flora" to its brief in 1980, when it was already 77 years old. The society has signalled its new botanical interest by sending out an expert to plan the conservation of the endemic flora of St Helena and by surveying the over-exploitation of mahogany by the world timber trade", writes its chairman a shade sanctimoniously. *HPS*, as it styles itself, publishes the learned journal *Orn*, which is also "now keen to extend its coverage in this respect".

From this point, page 11, until the obituaries begin on page 37 ("He joined the WFS in 1973 and reached Valhalla in the quickest possible time," notes one cryptically), it's flowers, flowers all the way.

Finally, the small ads, and a handful of diffident displays: "West Sussex Bed & Breakfast in Member's comfortable bungalow adjacent chalk grassland, Wealden woods and heathland..." The editor writes: "Please mention the Society when replying to advertisers. Your help in obtaining further advertisements will be appreciated."

Tony Samstag

Wild Flower Magazine No. 400, Summer 1984. The Wild Flower Society, 68 Outwoods Road, Loughborough, Leicestershire LE11 5LY tel 0509 215398.

George Walden

Don't swap, it only encourages them

Predictably, Colonel Gaddafi is angling for an "exchange of prisoners". The phrase has a worthy ring, with its overtones of truce, reciprocity and impending peace. Politically, there could be instant dividends too: the families of British detainees would naturally be relieved, everyone would welcome them back, and the Government could get credit for its commonsense and humanitarian approach.

Each side could then pretend an honorable solution to an important problem had been achieved, and that the way to the "normalization of relations" was now clear. Besides all this, the only casualties - principle, precedent, and the longer-term interests of other British or Western citizens abroad - would rank low indeed.

The Libyan affair is a perfect example of why such "swaps" are nearly always shortsighted. Most governments have their kind of unwritten rules, though even here it is not good policy to exchange big fry for small fish. Inter-German affairs also have their own curious logic, including a sort of humanitarian trade by which East Germans emigrate to the West in exchange for cash. It is not hard to imagine the internal political pressures on Bonn to maximize the flow. It is not an easy policy to condemn out of hand, though it does encourage bad habits in the East, from which we may all ultimately suffer.

Inevitably, in the last resort, each case has to be judged on its merits. The demerits of the Libyan case are all too obvious, especially in the light of experience. The Government has made firm negative noises, which the Libyans would do well to see as definitive.

The anguished uncertainties of the detainees' next-of-kin will weigh upon Whitehall. But if doubts develop, the Government should remember that supping with Colonel Gaddafi on these terms will buy as much long-term security for us all as beer and sandwiches with Mr Scargill.

The author is Conservative MP for Buckingham.

Anne Sofer

Hands up for more secret ballots

One of the funniest sketches in that much-missed programme *Not the Nine O'Clock News* was of a mass meeting of workers voting by show of hands whether or not to strike. Three mutually contradictory motions were passed in as many minutes, because the convoluted wording in which they were couched made them all sound worthy of support. Finally the organizers, losing patience, ended the meeting by declaring "Right. That settles it. All out!"

The parallels with what seems to have happened at Tilbury last Thursday are too close for comfort. And it was not the only port whose workers could not agree afterwards on what had been decided and how the voting had gone. Even those who were convinced they knew went in for some somewhat impressionistic arithmetic. "It was 70/30" said one with an air of statistical precision, "easily 3 to 1."

The impression is incomparably given to the public that union officials do not want a clear-cut decision unless it goes their way, and that they do not dare to trust their members by allowing a secret ballot. It presents a huge propaganda victory to the Government whose legislation imposing a "ballot-be-for-strike" procedure comes into force in a few weeks' time. "Trust the People" runs Labour's banner on top of County Hall this month. Mrs Thatcher might if she had that sort of humour, mount a counter-slogan - "Trust the workers" - on the other side of the Thames.

It is an irony that the opposition to the secret ballot comes from the left. It was specifically to protect working people, newly enfranchised by the earlier reforms of the nineteenth century but still voting in public and subject to intimidation from employer and landlord, that progressive organization fought for the secret ballot more than 100 years ago. That fight was fiercely resisted by many other reasonable people, who thought it a shabby furtive and unmanly way of conducting the nation's affairs.

The early political novels of Trollope are full of the dispute. Trollope himself was strongly opposed to the ballot, and the views of his characters reflect this. In "Phineas Finn", for instance, the sinister populist Mr Turnbull ("a demagogue and at heart a rebel, un-English, false and very dangerous") argues in favour, whereas the honourably radical Mr Monk declares ringing: "Every man possessed of the franchise should dare to have and to express a political opinion of his own - otherwise the franchise is not worth having, and men will learn that when all so dare, no evil can come from any such daring. As, the ballot would make any courage of that kind unnecessary, I dislike the ballot."

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SOLIDARITY SKIN-DEEP

At last year's Trades Union Congress much was heard about the "new realism", according to which union leaders were to come to terms with the democratic fact of a Conservative government confirmed in office at a general election on a programme of trade union reform. They were also to reappraise the temper and requirements of their members and modify their policies accordingly.

Mr Len Murray was the embodiment of that revisionist programme. He strove to apply it in the three-cornered dispute between the NGA, Mr Eddie Shah and the law. He was, he thinks, torpedoed by Cheltenham. Now he has the sad duty of sitting in the middle of the platform for the last time, in a week when his previous efforts will all be blown away by Mr Scargill's wind machine.

Instead of a new realism will be the old seeming, as the barons struggle to create an appearance of solidarity with strikers whose conduct many of them heartily disapprove of and whose peremptory demand that all pits be kept open until exhausted or unsafe many of them think unreasonable. They do not want to be tied to the NUM's chariot wheels; nor do they want to see the NUM routed, since their own power would be compromised in the collapse.

The formula that has been produced to provide cover for the confusion is equivocal. The general council affirms "total support" for the NUM's objectives of "saving pits, jobs and mining communities", and total support for measures to make the strike more effective by not moving coal or coke or substituted oil across NUM official picket lines and not using those

materials if they are taken across picket lines. However the same statement goes on to record that the NUM acknowledges that implementation of those measures "will need agreement with unions who would be directly concerned".

Since the main unions in the target areas of steel and power generation have signified that they do not agree to anything of the kind, the formula is self-confuting. Mr Terry Duffy of the engineering workers' union, for one, lays emphasis on that point. Mr Scargill prefers to think that the executives of those unions, whatever their present views, will be bound to further the policy once it has been endorsed by the TUC.

Even if Mr Scargill is right (and he cannot be right of the steelworkers, who have been through a period of rapid contraction far more severe than anything proposed for the miners and who are therefore tenacious of such jobs as remain) he reckons without the foot soldiers. "We are not in command of some army of conscripts or puppets" (Mr Murray again). The members have minds of their own, and are coming to expect to be afforded the opportunity to declare their minds by ballot. Their reluctance to join hands with Mr Scargill was mapped in three opinion polls reported in yesterday's papers. And there is harder evidence before the eyes of the delegates at Brighton in the duplicitous failure to sustain a national dock strike on behalf of the miners.

In compensation, it is claimed that the NUM has been obliged to give the general council of the TUC a purchase on the dispute. That is true; it enters by the same door as the new manifestations

of "total support" are supposed to issue from. The hope of the moderate members of the general council is that this will enable them to influence the miners' picketing tactics and negotiating stance. Perhaps; but with Mr Scargill's ruthless abstentionism on one side of the table and a vacillating and divided membership of the general council on the other, it is anybody's guess who will have more effect upon whom.

Once the miners had raised the standard of confrontation the traditions and practices of British trade unionism dictated a display of solidarity from the TUC. But the formula chosen for the purpose is a dishonest one with subsequent recrimination built into it. And it is silent on all the reservations it sponsors feel and could legitimately have expressed about the miners' action.

What is more, by formally associating the TUC with secondary picketing and action it removes the main ground for the inhibition, which has prevailed throughout the miners' strike, against taking unions to court for civil wrongs done through unlawful picketing and industrial action. The effects of such litigation on the attitude of moderate trade unionists will no longer have to be considered since they will already have become implicated in unlawful action through the decision of the TUC. The law may at last be drawn from its scabbard. The delegates at Brighton in the duplicitous failure to sustain a national dock strike on behalf of the miners.

But even if it should prove right that in some decades from now it will be economic to exploit coal seams which cannot be exploited today except at heavy loss, it is very strange indeed to conclude from this that the seam should be used up now. Once the coal has been dug out it is no longer available for future exploitation.

If one really believes that these submarginal seams will ultimately become very valuable, the right solution is to leave the coal in the ground, enabling future generations to exploit it by whatever means then prove most efficient - something which no one can know today.

Long-term pessimism about future fuel costs therefore simply reinforces the conclusions of those

THE EMPIRE STRIKES BACK

This summer President Chernenko disappeared from public view to enjoy the southern sun of the Crimean coast, but not all the communist party bureaucrats have found the holiday months relaxing. The Moscow leadership has launched a series of wide-ranging purges which have shaken the ranks of administrators the length and breadth of the USSR.

When senior officials in the non-Russian republics are dismissed and a few executed, the question of nationalist discontent naturally arises. Are the Russians in danger of losing their grip on the hundred or so other nations which form the remaining half of the Soviet population? But the USSR is less a Russian empire than a multi-national domain ruled by party apparatchiks drawn from all nations, and it is not so much Russian domination which is under threat as the continuation of the Kremlin's centralized control and the survival of the unworkable planning system.

Certainly the Russians have a higher proportion of top jobs than could be justified by their share of the population, which has probably dropped below the 52 per cent reported in the last census. Almost 70 per cent of Central Committee members, for example, are Russians. Promotion of the Russian language at the expense of their native tongues is resented by

many non-Russians, although a common means of communication is clearly required. There is a tendency to blame most of the hardships of life in the USSR on an alien system imposed by Russians alone, but responsibility for the present Soviet regime has to be shared more widely.

Moreover, an examination of the purges and harsh judicial measures reported recently in the press of the non-Russian republics suggests that the victims' offences were less of a nationalist nature than of a variety common enough throughout the USSR. In Georgia last month a clergyman, two doctors and an actor were sentenced to death for their part in an armed hijacking attempt; a girl student accomplice was imprisoned for 14 years. In January, the party newspaper *Zarya Vostoka* reported:

"One must look the truth in the face; it is not such a rare occurrence that from cultured, well-educated families come spiritually crippled young people, criminals and drug addicts. It was precisely such young people who committed that horrifying scandalous crime on 18 November last year..."

Their motivation was the same as for the defection of the young Estonian Mr Valdo Kampere and his wife, a desire to leave the USSR. Yet these were

PANACEA'S BOX

It is good to know, from an advertisement placed in *The Times* last week, that Joanna Southcott's box is still available to rescue the nation from its tribulations. The assurance came from the Panacea Society, guardians of the ark and testament of the Woman clothed in the Sun: crime, banditry, distress of nations and perplexity will continue to increase until the bishops do their stuff and open the box of sealed writings. Thereupon all will be revealed, with the advent of the millennium.

The bishops come into it on the authority of the prophetess herself, who declared before she died in 1814 that her box was to be opened at a time of national distress in the presence of four-and-twenty bishops, in line with Revelation, iv, 10.

The last time the box was opened was on July 1, 1927, in a ceremony at Church House, Westminster. It had come into the hands of the National Laboratory for Psychical Research.

Work of the elderly

From Mr Nicholas Clegg

Sir, National community service is once again being proposed, but this time for the elderly (letter, August 27). If it is to be compulsory, not only is the suggestion anti-libertarian, but it is a contradiction in terms to compel people to do good. It would, too, require a massive new bureaucracy to supervise it.

It is good to know that All bishops were invited. One turned up, and he a suffragan. The box was found to contain among other items a pistol, child's nightcap, dice box, calendar of the French Court of 1783, a lottery ticket (Richardson Good Luck and Company, 1795), coins, ear rings, an edition of the *Metamorphoses* of Ovid, and a book called "Surprise of Love, or an Adventure in Greenwich Park".

Something had gone wrong. Either the psychical research people had got hold of the wrong box or, more likely, the ceremony was under-bishoped and so ineffectual.

In the present state of affairs a panacea is just what is needed. Yet its discovery depends on twenty-four bishops being mustered for the purpose. It is not absolutely certain that they have to be Anglican bishops though in the lifetime of Joanna there was no other sort of bishop abroad in the land; and in doctrinal matters, as distinct from special illumination, she

is, however, all that is proposed is a voluntary scheme, ample opportunities already exist for older people to give their time and talents in community service. There is a breathtaking diversity of opportunity in the voluntary sector and for those who seek guidance REACH (Retired Executives' Action Clearing House) or the 300 volunteer bureaux throughout the UK can see that their skills and experience are put to appropriate use.

It is barbaric to suggest that those in receipt of a hard-earned pension should be compelled to carry on working. The individual does not yet belong to the state.

Yours faithfully,

NICHOLAS CLEGG, Director, REACH, Victoria House, Southampton Row, WC1. August 28.

Pit strike implications for Britain

From the Director of Christian Action

Sir, On your front page today (September 1), alongside the headline "Jobless up 15,000 in steady trend" - to 3,115,838 - is the other: "MacGregor puts case to the TUC". Much of the page concerns, of course, the miners' strike.

The issues of the strike are complex, but is there any doubt that it is overwhelmingly by people who fear they are the next in line for the "steady trend"? Those who are already unemployed will understand the strikers only too well. Those in full-time work and whose jobs are not threatened will find understanding more difficult.

A deep-seated fear cannot be cast out by reason alone, especially if that fear is not groundless, e.g., if the "steady trend" has advanced to your door.

That, surely, is why the situation calls for a new imaginative quality of reconciling initiative.

Yours sincerely,

ERIC JAMES, Director,

Christian Action,

11 Denby Crescent,

Kensington, SE11.

September 1.

(like myself) who have no confidence in such forecasts. These are, that we should currently be relying to a considerably greater extent than we do on coal imports which are available from several countries at costs well below those of any but the most efficient of British mines.

You faithfully,

ALAN DAY,

9 Bingham Street, N1.

August 24.

From Mr M. A. Adburgham

Sir, It is surely time the banks and building societies took stock of the striking miners' position and counselled them against disaster. They are being drawn further and further into debt. Wage increases in the future will relate to circumstances existing at the time. They cannot recover, retrospectively, massive debt arrears.

The banks and building societies may have granted a moratorium on loan interest and mortgage repayments, but they cannot revoke interest charges nor money lent. It is not their money to give away; it belongs to their shareholders, depositors and investors.

Many miners will be tempted to borrow money to repay borrowed money (the classic trap) and to repay money lent on credit by local retailers.

Out of kindness and probity, the banks and building societies and all reputable money lenders should now put a stop to the open-ended credit they have allowed, or tens of thousands of honest miners will be faced with a terrible personal calamity.

I am, Sir, yours etc,

M. A. ADBURGHAM,

1 Mill Lane,

Benson, Oxfordshire.

August 28.

From Professor Alan Day

Sir, Mr Aubrey Jones (August 24) like a number of your other correspondents derives lessons for current fuel policy from attempts to forecast the demand for and supply of various kinds of energy as far as 50 years ahead. Such forecasts of technological and economic circumstances are almost certainly grossly misleading.

(Who in 1934 could possibly have forecast the fuel situation in 1984?)

But even if it should prove right that in some decades from now it will be economic to exploit coal seams which cannot be exploited today except at heavy loss, it is very strange indeed to conclude from this that the seam should be used up now. Once the coal has been dug out it is no longer available for future exploitation.

If one really believes that these submarginal seams will ultimately become very valuable, the right solution is to leave the coal in the ground, enabling future generations to exploit it by whatever means then prove most efficient - something which no one can know today.

Long-term pessimism about future fuel costs therefore simply reinforces the conclusions of those

National security

From Mr Roy D. Roebuck

Sir, The GCHQ position is disturbing for a reason other than those advanced by Mr Jeremy Windust (August 27).

The notion that matters of national security are solely for ministers overlooks those issues settled by the Glorious Revolution, not least the annual voting of supplies.

It is, Sir, a convention of the Constitution that matters of national security are discussed by party leaders in their roles as privy councillors pending the voting of supplies.

I have the honour to be, Sir, your obedient servant,

ROY ROEBUCK,

5 Pump Court,

The Temple, EC4.

Just desert

From Lady Jeger

Sir, I have just read Philip Howard's welcome piece (August 28) about the use of "just". Following this, I have just recalled that about 30 years ago when I joined the Manchester *Guardian*, that doyen of editors, A

P. Wadsworth, insisted that "just" could only be used as the opposite of "unjust".

Wadsworth, thou shouldst be living at this sloppy hour of writing! Anyhow, I have just decided hereafter to join Philip Howard in seeking to avoid "the pox of this little word". Would that such resolution could be as infectious as the pox.

Yours,

LENA M. JEGER,

House of Lords.

August 28.

Colour of Big Ben

From Dr Stephen Pasmore

Sir, Dr Edwards (August 25) is wrong. The chiming of Big Ben could never give offence to Oxford because they were composed by the young William Crotch after he had left his post as organist at Great St Mary's, Cambridge, and moved to Oxford.

Crotch admired Handel and adapted "I know that my Redeemer liveth" from *Messiah* to create the chiming.

Yours faithfully,

STEPHEN PASMORE,

South Cottage,

Ham Gate Avenue,

Richmond, Surrey.

Code for new cults

From Mrs Beryl Garside

Sir, Mr David Alton, MP (August 18) and Mr Casey McCann (August 21) suggest that a "voluntary code" for new religions would protect civil rights without infringing religious liberty.

Mr Alton proposes "to forbid long-term commitments before the age of majority"; in confirmation then to be outlawed? His code would "require information on individuals and groups to be made available".

Does this mean a state register of individual religious affiliation and the end of confidentiality of the confessional?

It would "allow freedom of access to cult members at all times"; what then of closed monastic orders and the individual right to privacy?

The principle of religious freedom, it has long been established, exists for all or none. The code which has been proposed sounds in no way voluntary and should ring alarm bells for all who value their freedom to do as they please.

Who it is asked, could object to a voluntary code? Who indeed? It should be remembered that it has traditionally been the role of religion to provide the spiritual and moral lead in society, and that virtually all major religions have in their infancy provoked violent reaction for attempting to do just that.

There is indeed a good argument

for the growing interfaith movement to isolate the moral principles held in common by different faiths, and to seek to promote these in a secular context.

Such a code might have immense value for all of society and would certainly be a force against rising crime, family upheaval and drug addiction.

Sincerely,

BERYL GARSDIE, Chairman,

REACH,

Victoria House,

Southampton Row, WC1.

August 28.

LETTERS TO THE EDITOR

Children as our

World aerospace

Aviation is moving out of recession and the airlines are in a buying mood. There are signs of optimism at this week's international air show and flying displays at Farnborough.

THE world aerospace industry assembles at Farnborough today for the Society of British Aerospace Companies' biennial exhibition and flying display in a more buoyant mood than two years ago when the recession was still biting, and sales of aircraft, engines, and equipment were in the doldrums.

Passengers and freight are now returning in encouraging numbers to the airlines, putting this sector of the industry into a buying mood, while the absence of any *deterre* between East and West is increasing the sales prospects of the military sector.

SAC estimates the total world market for civil, military, and space "hardware" sales between this show and the end of the century at some £1,000bn. It also estimates that 350,000 people will pass through Farnborough's gates between today and next Sunday, when the air show closes, to view the wares of 500 exhibitors from 23 countries, which include 150 aircraft, 70 of which will take part in the flying display each afternoon.

Nobody expects that any large orders will be logged and announced during the course of the show. Farnborough, and its great rival the Paris aviation *salon*, held in alternate years, are for seeing what the aerospace industry is developing, and for metering potential customers — contacts which may not come to fruition for several years.

It is also for coming together with partners, for few aerospace manufacturers today can muster either the financial or technological capacity to embark on new projects of their own.

Developmental costs of aerospace are becoming enormous as its customers demand quieter, lighter, safer, and more efficient products. Two of the major trends in the industry which will be mirrored in the new aircraft on show, and in the exhibition halls, space in which was over-subscribed by 30 per cent several months ago, are advanced aviation electronics (avionics), and new materials designed to replace aluminium, the basic aviation construction metal since wood and wire went out of fashion in the 1920s.

Of these two advances, avionics is making the faster progress, and most of the new aircraft coming off the production lines in Europe and the

United States have their essential flight instruments generated by computers on to cathode ray tube screens on the flight deck, and have the ability to fly themselves with great accuracy on journeys across continents.

But amazing as these inventions are, the avionics sector of aerospace believes they are only the beginning of a revolution as the microchip becomes more powerful and even smaller.

New materials, notably carbon fibre and other composites, and lithium-aluminium, already form non-load-bearing structures in a number of aircraft in both airline and military service today, and are beginning to be employed for some primary structures as well.

British Aerospace has a contract to make an all-carbon fibre wing for a new Swedish fighter, while only a few days before Farnborough began the company joined up, at its Kingston-upon-Thames factory, the main sections of the second-generation Harrier vertical take-off interceptor which, in its various versions, will have an all-composite wing, cockpit, and horizontal tail.

The day of the all-composite aircraft is still a long way off, and the debate will continue at Farnborough over whether carbon fibre is really the material for the future, or whether it will be lithium-aluminium, which can be worked on existing machinery. Both are, at present, more expensive than aluminium but, being lighter, offer attractive payload savings, a factor which, with future uncertainties over the price of oil, the aircraft industry cannot ignore.

The arrival for the first time in the history of the Farnborough Show of the Russians will inevitably create a great deal of interest. None of the three aircraft, a turbo-prop airliner, a big helicopter, and the wide-



bodied Il-86 airliner, is new to the West, in fact the latter has been displayed at several Paris shows and has been in service with Aeroflot on air routes within the Soviet Union for five years.

The stationing of these aircraft on the Farnborough flight line will, however, give western observers a leisurely opportunity not normally afforded to size up the progress of Soviet aviation technology. The Russians, in their turn, will no doubt be anxious to measure western technology.

Although perhaps more open than it was in the past, the military side of the business at Farnborough will still be limited by security in what it can display. Noticeable trends here will be in avionics, not only navigation and cockpit displays, but in early-warning radars and infra-red detectors, and in the miniaturisation of missile systems.

Companies will also be ready to show their progress in "stealth" — that is, making aircraft less detectable by shielding the "signature" of their engines from heat-seeking missiles, and by employing new coatings on their wing and fuselage surfaces to lessen their reflection on radar screens.

In the space sector, the entries of

four television channels. The main drive of the aircraft engine manufacturers, as laid out in the Farnborough exhibition halls, will be towards a new generation of powerplants which will offer the airlines and the military more power for less fuel — and at fewer decibels than in the past.

An important topic of debate in this sector of Farnborough will be the recent decision, albeit still with some qualifications, to allow the development of a short take-off and landing airport in the disused London docks only six miles from the centre of the city. This is bound to create a special interest in the two airlines which will initially operate into the London Stansted, the de Havilland of Canada Dash 7 and Dash 8, both of which will be on the flight line at the show.

From today until Thursday are trade days at Farnborough, when the airline chiefs, the military leaders, the ambassadors, and the politicians will be visiting to investigate the trends mentioned above. Friday, Saturday and Sunday are the public days.

To entertain them, there will be, not only the 70 aircraft in the flying display, but historic machines including a Spitfire, Hurricane, and Lancaster, and the Royal Air Force aerobatic team the Red Arrows in their BAe Hawks. It all looks as if it will add up to a vintage Farnborough show.

Arthur Reed

ON OTHER PAGES

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- Europe's partners; the engine producers Page 15
- On show at Farnborough; the world of components; defence and missiles Page 16
- Russia's debut Page 17
- The airline business; role of small nations Page 18

Flying with foreign partners

Starting rises in the cost of design, research and development, and production have forced more and more aerospace manufacturers into cross-border collaborative projects since the last Farnborough show so that there is today hardly one major aircraft-maker which does not have foreign partners, often based on the other side of the world.

But even with four powerful nations working together, as in Europe, finding the development funds for future projects presents problems, a case in point being the TA 11, a four-engine, long-range airliner, which France, West Germany, Britain, and Spain would like to start as a replacement for the ageing Boeing 707, now out of production.

The willing partners to be courted

The cost of the TA 11 project could be as high as £1bn, and none of the partner manufacturers is confident of being able to obtain its share from its government so soon after obtaining funding for the A320.

New partners, willing to invest money to learn aerospace technology, are therefore being sought. The Japanese and the Chinese, both already heavily-dependent on western aviation "know-how", are the obvious nations to be courted, but there are other countries with aerospace aspirations, among them Brazil, Romania, and Indonesia.

In the meantime, the aerospace manufacturers of the West are seeking to increase their efficiency and lower their costs through greater use of computerised design and machine-tool control, and the wider application to the airframe and engine structures which they are building of lighter, and in the long-term cheaper, materials such as carbon-fibre and other composites, and lithium aluminium.

There is no doubt that a large aircraft made almost entirely of composites, as opposed to gliders, some of which have been built of these materials for several years, will enter service before the end of the century, but as has been proved in the case of Lear Fan and its efforts to produce an executive jet of non-traditional aerospace materials, there are still a lot of problems to be solved along the way.

AR

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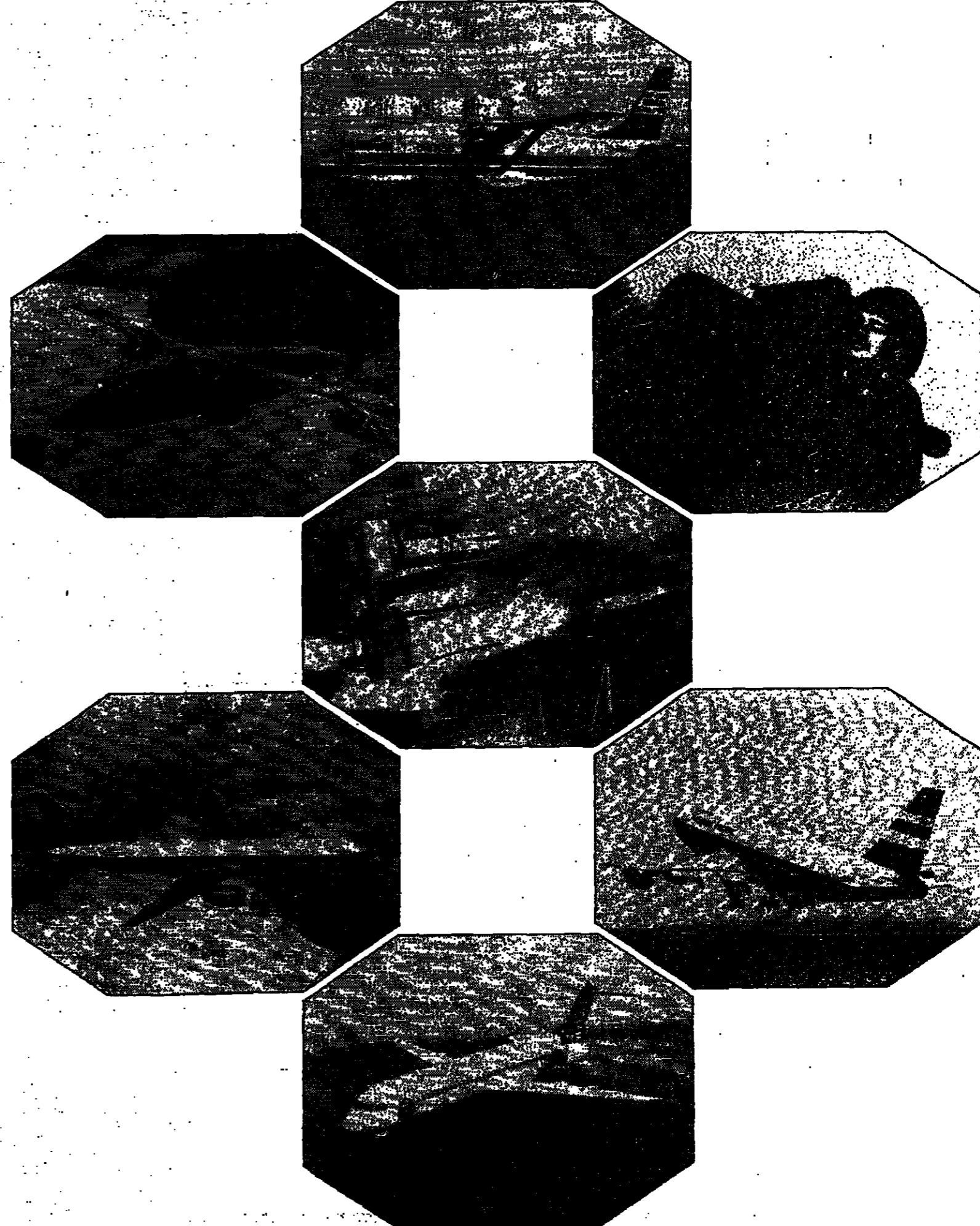
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- Producing the advanced, second-generation 36-seat 360—best-selling aircraft in its class and already flying with 19 major regional carriers.
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- Building the world's largest light aircraft — the Skyvan STOL transport now flying with over 40 operators.
- Manufacturing and developing the United Kingdom's most successful range of close-range guided missiles — including the combat-proven Blowpipe and Seacat and the advanced Javelin system.
- Providing high-technology jet engine nacelle components for the Boeing 747 and 757 and the BAe 146.
- Manufacturing a range of major, precision components for the 747, the 757, the Fokker F28 and the new Fokker 100.
- Designing and producing some of the largest advanced carbon-fibre components ever to be used on passenger aircraft.
- And — shortly to enter service — the unique, multi-role C-23A Sherpa freighter which is in production for the USAF against orders and options worth some £460m.

SHORTS

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MCALPINE AVIATION
YOUR BUSINESS IS WORTH IT.

With a number of new projects agreed during recent months, the British aircraft-manufacturing industry now has one of the most comprehensive ranges of civil and military aircraft, helicopters, engines and missiles in its post-war history. But it is continuing to find the market for these products slow as potential customers shake off the effects of world-wide economic recession.

Since the last Farnborough show the industry has shed some staff and closed some factories, but at the same time - conscious of the fact that the development period for new aircraft can be five years or more - has committed itself to investing enormous sums of money in its future.

The most significant investment came in the spring when, after months of uncertainty, the Government agreed to sanction loans of up to £250m so that British Aerospace could design and build the wing for the new European Airbus A320 airliner.

Bae had originally requested £437m from the Government, proposing to put in an additional £200m from its own funds, to meet the total cost of wing development of £637m. It is now finding the difference between that figure, and government loans, from profits, and from commercial loans.

In taking on this heavy financial load, and at the same time increasing the 30 per cent stake which it had in the two previous Airbus projects, the 300-seat A300 and the 220-seat A310, to 26 per cent, Bae reinforced its faith in collaboration with the European aerospace industry. At the same time, it proved that it is still able to build on its own by launching, at a cost from its own funds believed to be around £150m, the advanced turbo-prop (ATP), a "stretch" to up to 72 seats of its long-serving 44-seater 748 airliner.

The decision to launch the A320 was taken with 51 orders from five airlines; that to launch the ATP with no orders at all. The Bae 146 70/100-seat airliner picked up a prime customer in Pacific Southwest Airlines, of San Diego, California, with an order for 20, worth \$300m, with options on a further 25, but the hunt for

America's vast aerospace industry, boosted by the Reagan administration's rearmament programme, is at least in financial terms heading towards a year of consolidation and improving profitability boosted by a growing optimism that the world's airlines will soon begin a massive ordering spree.

Most of the signs are now pointing to a more healthy climate for the plane makers as the world's major economies pull themselves out of recession. More than \$100bn of civil aeroplane orders are reasonably expected to be placed in the next 10 years - and it is clear that the production and technological expertise and financial might of the giant US aerospace corporations will ensure that they prosper as a result.

Even a cursory glance at the latest financial statements of the big US companies - Boeing, McDonnell Douglas, Lockheed and Rockwell - reveals an expanding, optimistic and forceful sector of the US economy. It will also put into perspective the aerospace industries of other nations, even the pan-European Airbus Industrie consortium which is the only real competitor to the American industry.

Boeing, by far the world's largest jet airliner manufacturer, it has made almost 5,000 announced pre-tax earnings for the first half of 1984 of \$259m against \$251 in the same period of 1983. The company said the rise was attributable "primarily to increased interest income and continued favourable performance on US Government programmes".

Mr T A Wilson, the Boeing board chairman, said the world's airlines had experienced a growth in traffic and projections indicated a significant improvement in profitability for 1984, but he stressed that the market for commercial aircraft remained extremely competitive. "There continues to be excess capacity, especially as it relates to wide-body jumbo jets and the competition for the balance of the market is very aggressive."

Such conditions, said Mr Wilson, continued to result in substantial pressure on prices and in some cases the requirement for trade-ins of older airplanes and financing commitments.

In recent months, business has picked up significantly for Boeing. In the first half of this year, civil aircraft deliveries totalled 68 planes against 127 a year earlier. After seven months, however, sales stood at 111 aircraft compared with 136 for the whole of 1983.

Boeing's sales to the US Government in the first half totalled \$1.955m, a rise of \$426m compared with a year earlier, and the company said confidently that growth in military sales was expected to continue through 1984 and into the foreseeable future.

The company's firm order book at the end of June was

further buyers goes on up against formidable competition from the Americans and now the recently launched Fokker 100 twin-jet.

Bae recently completed an extensive sales tour with the 146 of China and other countries in the Far East.

The long-term nature of the aerospace business is proved by the continuing success of British Aerospace's 125 executive jet, the first version of which made its maiden flight as long ago as

the Civil Aviation Authority.

But the Jetstream is, or soon will be, up against a new generation of turbo-prop commuter airliners, such as the US-Swedish SF340, the West German Dornier 228, the French-Italian ATR 42, and the Spanish-Indonesian CN-235, all of which are actively seeking airline funds. This also applies to the two commuter airliners being produced by Short Brothers, of Belfast, the 330 and the 360.

The decision to launch the A320 was taken with 51 orders from five airlines

August, 1962. In the intervening years the *marque* has been progressively improved, and the latest 800 series is equipped with automatic flight control, and cockpit instruments displayed on cathode ray tubes. The sale of the 500th 125 is expected by the end of this year.

Completing the Bae civil aircraft "family" is the Jetstream 31, a 19-seat twin turbo-prop which is beginning to sell well to small commuter airlines in North America, Australia, and now in Britain as new entrants to the airline industry are freed from licensing restraints by recent decisions by

These have sold well during the period while the foreign aircraft mentioned above were being developed, and all manufacturers are now watching closely to see whether airlines will continue to prefer the simple and rugged reliability of the *Short* products, or turn to the greater and more expensive sophistication of the contemporary designs.

Westland, Britain's only manufacturer of helicopters, is also in the thriving commuter business with its W30, a civil version of its military Lynx, which is in service in Los Angeles and New York. But

Westland's main sales and future development thrust continue to be in the military sector, and to this end the company flew its Lynx 3 prototype, faster and with a greater payload than previous versions, this summer.

Government funding to Westland of £41m for its W30, and of £60m for its part in the development of a civil version of the EH101 helicopter on which it is in partnership with the Italians was announced earlier this year. The EH101, due to make its maiden flight in two years' time, is powered by three American-made engines and is being produced in naval and army versions, as well as the civil type, which will seat 30.

While British Aerospace reported profits for 1983 of £82m, Rolls-Royce, Britain's only aircraft-engine company had a net loss of £193m as the workforce was reduced, new orders sought, and new alliances forged.

Like the airframe manufacturers, Rolls has found it too costly to develop new engines on its own and has this year teamed up with its traditional US rival Pratt and Whitney, together with engine companies in Japan, West Germany, and Italy, to develop a new engine, the V2500, designed to power the new generation of 150-seat airliners such as the European A320. At the same time, it has entered into a more limited transfer of technology with its other great American competitor, General Electric.

A lack of firm decisions on future military aircraft is bedeviling long-range planning in the British aerospace industry at present. Airframe, engine, equipment, and aviation electronic companies would welcome early indications from government, as the end of Tornado production comes in view, on what role they are to play in the Eurofighter project, which of four competing trainers is to be selected for the RAF, and whether the single-seat fighter version of the BAe Hawk trainer, being unveiled at this Farnborough show, is to be funded into full production.

AR

The 737-500 may also be Boeing's answer to the Airbus A320, the 150-seater due to enter service in the spring of 1988. All-new 7-7 model for this sector has been left on the drawing board — the market, says Boeing, does not justify the investment.

McDonnell Douglas also has shelved plans for a new competitor to the A320 and for the moment is relying on its successful MD-80 of which three models are now in production. Here again, a proposed version the MD-88 seating up to 164 passengers would be equipped with the IAE engine.

In February, the MD-80 received a massive boost with an order for 67, worth \$1.3bn, from American Airlines, plus an option to buy a further 100.

The company this year also reversed its decision to phase out the DC-10 tri-jet when Federal Express, the US-wide parcels delivery business ordered six in a \$350m deal.

McDonnell, which went on the acquisition trail last year and bought, among other companies, Hughes Helicopters, boasted a 26 per cent increase in earnings in the second quarter of this year. This boosted the half-year figure to \$142.2m net earnings from \$121.4m a year earlier on sales that rose from \$4bn to \$4.57bn.

The company, like its other US counterparts, is doing well from military contracts. The F-15 Eagle fighter, F/A-18 Hornet aircraft carrier strike fighter, and the AV-8B Harrier II (the US version of the British jump jet) are, according to McDonnell, unmatched as a family by the competition.

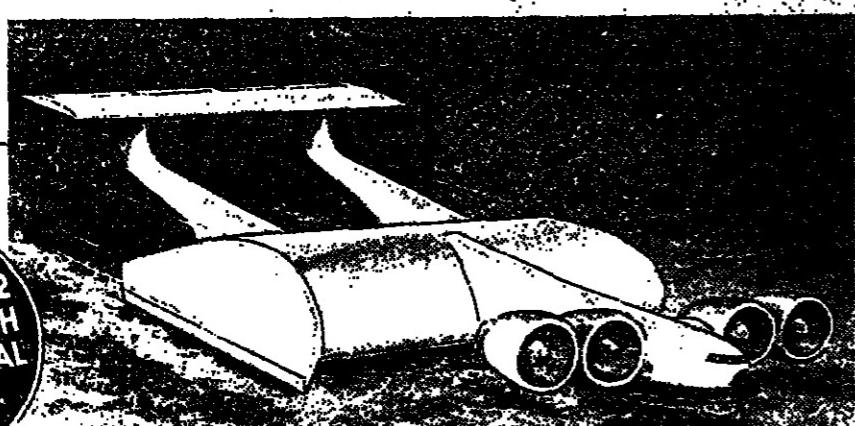
Elsewhere in the US industry, there have been some remarkable financial performances recorded by those such as Rockwell, Northrop and Martin Marietta. Rockwell, producer of the Space Shuttle, has been helped by the revival of the B-1 bomber programme. The first B-1B is due to be rolled out this autumn and the \$20.5bn programme involves production of 100 aircraft.

Lockheed, producer of the titanium-skinned Blackbird reconnaissance aircraft and the famous Hercules transport plane, has received spectacularly since ditching the loss-making TriStar, its net income rising by 22 per cent in the first half of this year to \$146.4m.

Last year, Lockheed announced its interest in building a new supersonic airliner in the 1990s once a suitable partner could be found. The company wants to get its civil business back to the 30 per cent level it achieved when the TriStar was in production and believes that a supersonic airliner bigger than Concorde could win customers in the rapidly growing Pacific Rim regions.

Edward Townsend
Industrial Correspondent

FACT, FICTION OR FLIGHT OF FANCY?



SEE US ON STAND NO. SH2 FARNBOROUGH INTERNATIONAL 2-9 SEPT. 1984

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British Aerospace, putting faith and money on the wing

the Civil Aviation Authority.

But the Jetstream is, or soon will be, up against a new generation of turbo-prop commuter airliners, such as the US-Swedish SF340, the West German Dornier 228, the French-Italian ATR 42, and the Spanish-Indonesian CN-235, all of which are actively seeking airline funds.

The long-term nature of the aerospace business is proved by the continuing success of British Aerospace's 125 executive jet, the first version of which made its maiden flight as long ago as

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The long-term nature of the aerospace business is proved by the continuing success of British Aerospace's 12



The Tornado shows off its crew - and its hardware

Europe: the new force in aerospace

The successful launch last month from Kourou, French Guiana, of the Ariane-3 rocket carrying two European telecommunications satellites reinforced Europe's claim to be taken seriously as a world force in aerospace.

Its beginnings in the early years following the Second World War were inauspicious, as dozens of small companies went their own and often competing ways with airframe and engine projects, but in the middle 1980s the European aircraft industry has come together impressively and provides a balance to that of the United States.

Ariane provides a case in point. Were it not to exist, the nations of the Western world wanting to put hardware into orbit would be dependent upon the American space shuttle, and there would be no brake on the cost of each ride.

Early faults in the Ariane system, which produced two crashes in the programme, now appear to have been overcome as a result of the growing technological confidence which is evident within European aerospace, and there have now been five perfect lift-offs since June of last year.

European governments, notably those of Britain, West Germany, and France, have invested heavily the taxpayers' money to achieve a position in world aerospace, but justify this expenditure on the triple grounds of balancing the American effort, of job creation, and of the accretion of high-technology knowledge, in computers, in metals and other materials, in design, and in electronics, which has an impact

throughout a wide spectrum of other European industries.

European aerospace is certainly no cottage industry today, making simple products, and leaving it to the United States to initiate all the running in pure and applied research.

At the British Aerospace factory at Warton, Lancashire, a Jaguar bomber has been converted successfully into a "fly-by-wire" aircraft, that is, the mechanical links which connected the pilot's controls with the moving surfaces on wings and tail have been removed and replaced by electronic signalling via computers.

Gearsticks both side of the pilots

A similar system is now to be found in the A320 150-seater airliner which is being developed by the European consortium Airbus Industrie. In addition, the airliner will be controlled by small sticks, the size of a gear lever of a motor car, in place of the traditional control columns.

The sticks are situated to the left and right of the pilot and co-pilot, leaving them an uninterrupted view of their instruments - which are largely displayed on computer-driven cathode ray tubes, rather than on the traditional electro-mechanical dials.

Europe is now anxious to embark on two further technically-advanced, but highly-expensive projects: a European fighter, and a long-range, four-engine airliner, the TA II. Such projects show up one of the continuing weaknesses of the European

system, the need to obtain agreement of a number of partners, which is a time-consuming process, particularly when such enormous sums of investment money are involved.

While the talking continues the Americans prowl the European markets with their own excellent range of aerospace products, both military and civil. Although Airbus has stemmed the US tide, with the majority of the big European airlines choosing its products, the military scene is not such a happy one for the indigenous manufacturers.

This highly significant deal,

described by the Rolls chairman, Sir William Duncan, as a watershed for the company, gives each partner a share in the other's development of big engines in the 25,000lb-60,000lb thrust range.

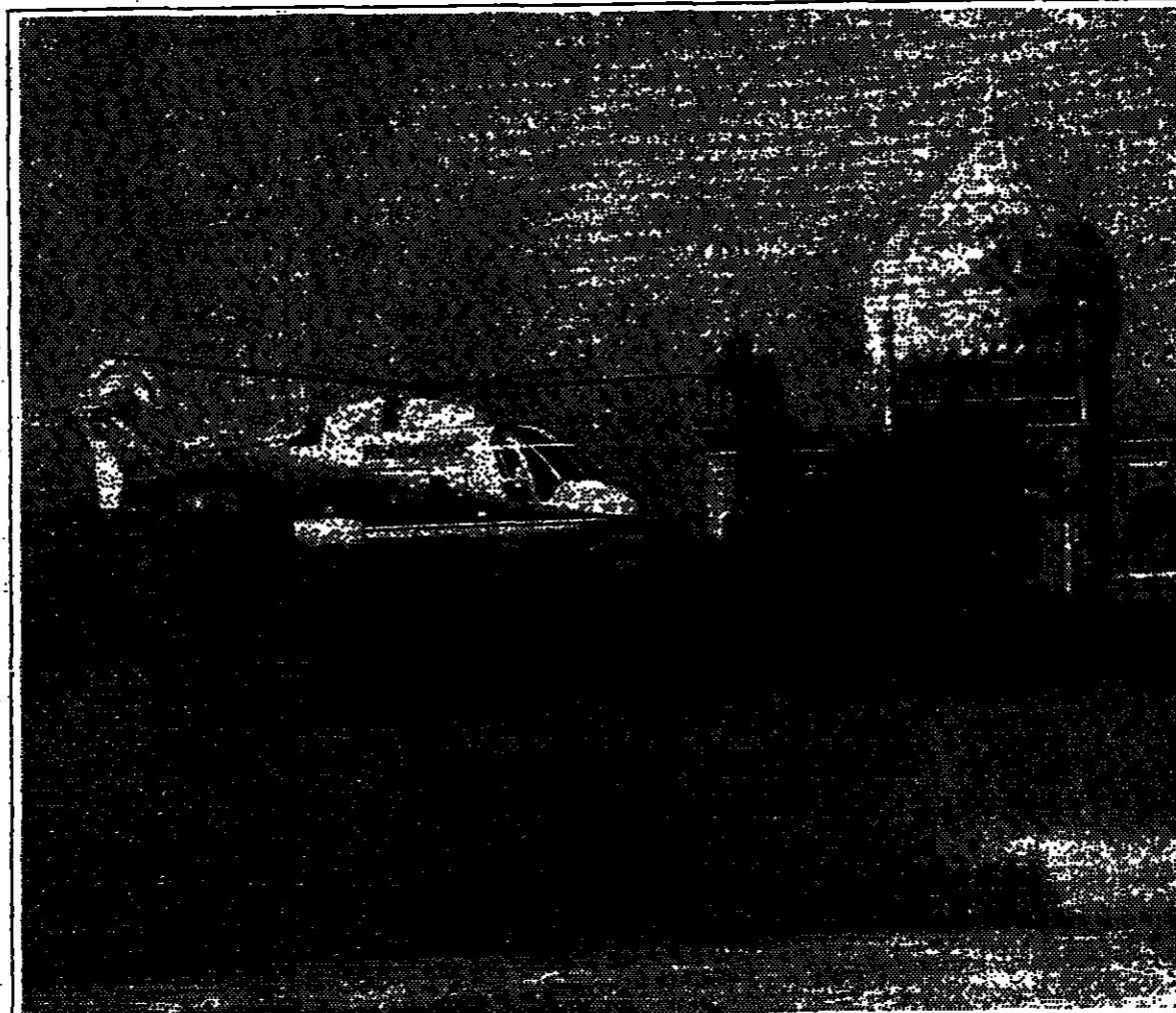
Only the forces of the three partner manufacturing nations of the Tornado bomber, Britain, West Germany, and Italy, have bought the aircraft, and almost all air forces on the continent have the latest US fighters in their inventory, with the American F-16 being made in the Netherlands by the Fokker company.

In addition to the F-16, there are other examples of transatlantic aerospace cooperation - SAAB, of Sweden, collaborates with Fairchild, of the US to make a new commuter airliner; Shorts, of Belfast, makes parts for the Boeing 747. But overall today America and Europe are split into two aerospace camps.

It is a battle which is deeply felt by those who lead the two sides. As M. Bernard Lathiere, president of Airbus Industrie said when his consortium beat the Americans to a particular airline deal: "Little Red Riding Hood has bitten the wolf."

AR

The Jewels in our Crown.



To call the Westland 30 a jewel is no mere flight of fancy.

It is quite simply the finest, most versatile helicopter in its class.

It has been highly successful in the UK. It's now making inroads into the notoriously difficult American market.

And today, even as you read this, it is the subject of intensive negotiations with the Indian government as well as many other customers throughout the world.

It's another jewel in the Westland crown. But only one of many.

EH101 The world's newest helicopter being developed by Agusta of Italy and Westland of Great Britain - backed by both governments with both military and civil versions in its first generation.

LYNX 3 An effective, heavily armed multi-mission helicopter for maritime and army roles - as an anti-submarine helicopter packing a heavy punch against surface ships, the battle proven Lynx can operate from small ships in the roughest weather, day or night. In the army role as a dedicated tank fighter Lynx is one of the most heavily armed helicopters in the Western world.

SEA KING Versatile, capable and effective, bought by nine countries, flown in many different roles and equipped with the most advanced

anti-submarine weapon system.

A20 Our new A20 trainer aircraft, a joint venture with the Australian Aircraft Corporation, is the only turbo-prop trainer specifically designed to fulfil the needs of the world's Air Forces, well into the 1990s and beyond.

AP1-88 In the civil field, the Westland AP1-88 can carry up to 100 passengers in air conditioned comfort, and is already winning export orders for Britain.

BH.7 Since building the world's first hovercraft, Westland have continued developing air cushion transport. The BH.7 military hovercraft brings a new level of mobility and speed to the naval transport and fighting ability. And as a minesweeper, it is invulnerable and unbeatable.

LONG LIFE HELICOPTER BLADES A major advance in international helicopter technology, Westland designed helicopter blades

in composite materials are long-lived, need no maintenance, reduce operating costs and are available now for the Sea-King and S61 range of helicopters.

WESTLAND TECHNOLOGIES

Normalair-Garrett, the heart of Westland Technologies is at the forefront of systems technology and has scored major successes in the USA - with the miniature digital data recorder on the F-18 fighter and OBOGS - selected for the B1B bomber to provide a continuous supply of oxygen for the crew without any storage on board - no heavy bottles, no dangerous liquid oxygen.

THE FUTURE We're working hard at Westland on products of the future - helicopters, hovercraft, advanced systems, all of which meet the world market for advanced transportation and systems. And we're constantly developing and improving our current range of products. It's the kind of constant hard work that has built Westland into the internationally known British company it is today.

And the kind of hard work that will bring in the glittering prizes of tomorrow.

Westland plc

Yeovil, England

Edward Townsend on why engine producers now have partners

Marriages that must work

Collaboration has been the key word in any discussion of the world aero engine business in the past two years. But behind the comradeship there have been extremely hard bargaining sessions and some agonising heart searching as the manufacturers try to guess the future of their highly competitive markets.

None of the world's major engine producers, and very few of the smaller companies, are now without at least one partner, the most significant impetus to their marriages being the enormously high investments needed to develop new jet engines.

The rash of cooperation has also occurred at times when airlines have been hit by the worst recession since the war and new aircraft orders have been scarce. Following successive oil crises in the 1970s and increasingly stringent noise regulations, operators have been demanding more fuel efficient and quieter power units.

In the case of Britain's state-owned Rolls-Royce, brought to its knees in 1971 by the expense of developing the RB 211 engine for the Lockheed TriStar, going it alone was finally abandoned earlier this year when the company and its rival General Electric of the United States became risk and revenue sharing partners.

This highly significant deal, described by the Rolls chairman, Sir William Duncan, as a watershed for the company, gives each partner a share in the other's development of big engines in the 25,000lb-60,000lb thrust range.

At the same time, Rolls is taking part in GE's programme to develop the CF6-80C2 engine, the type of high technology unit for wide-bodied jets such as the Airbus A300.

There are already four other partners in the GE development - Snecma of France, Volvo of Sweden, Motoren-und Turbinen-Union of West Germany and Fiat Aviazione of Italy. These four have a 20 per cent stake.

The Rolls/GE tie up was announced at the same time as the British Government said it would stump up some money for Rolls' planned stake in the V-2500 engine, a power unit designed for the coming generation of high technology 150-seat aeroplanes.

In May, Rolls was told that it could expect to receive only £60m of the £113m it had sought from public sources. In

total, the company's stake in the £750m engine is about 30 per cent.

The V-2500 project,

originally involving Rolls and a group of Japanese aerospace companies, had already been expanded to include the arch competitor of the British company - Pratt & Whitney of the US, plus MTU and the Fiat subsidiary.

These two collaborative ventures should, it is hoped, ensure that Rolls maintains its position as the world's number three aero engine maker for the rest of the century. Without them, there is little doubt that as the weakest, Rolls faced a bleak future.

A further collaboration deal

was announced towards the end of May when Rolls said it was sharing with Turbomeca of France the cost of a £100m helicopter engine development programme.

The engine, the RTM 322,

will be a 2,100 hp turboshaft

unit for use in aircraft like the planned EH 101 being produced by Westland and Augusta of Italy. It could also power

replacements for the Wessex

and Puma helicopters currently

in use by the Royal Air Force.

Rolls has been in need of the

kind of support to be gained

from collaboration as it was so

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Most of the engine producers

are now looking decidedly more

optimistic.

Rolls believes that while real

overall growth in the 15 years to

1998 in the airline business will

Getting a jigsaw off the ground

The process of creating a large jet airliner is a hugely complicated process involving not only safety and stringent quality control but also the bringing together of an enormous number of parts and components.

A vast multi-million pound world industry has been developed to supply the big aerospace companies. Most of the equipment supplied is as vital in terms of weight, passenger comfort and safety as the more readily recognizable engines or the airframe itself.

Airbus Industrie's headquarters at Toulouse in southern France, like its American competitors has a series of interior mock-ups of its two wide-bodied aeroplanes - the A300 and A310 to demonstrate to potential customers the type of interior furnishings that are offered.

Rows of different-coloured seats, some harder - which the Germans like - some softer, for the French, can be tried and compared. The range of galley equipment and configurations, toilets with folding or sliding doors, and handles to assist handicapped people - all items

that have to be considered in detail both for cost factors and service to the customer.

Competition is fierce among the suppliers and has intensified during the world recession. According to Airbus, customers no longer demand equipment from their own national industries; quality and price are now more crucial.

However, in the field of high-technology ancillary aircraft equipment, Britain's Lucas Industries figures largely in the industry and is an undoubted world leader.

Lucas is still hit by recession

Lucas Aerospace produces all sorts of bits and pieces ranging from computerized wing mechanism controls for the Tornado multi-role combat aircraft to engine ice protection systems.

Last year Lucas's sales of aerospace equipment were worth £255m, some £16m lower than 1982 but the slowing down of redundancy and the improvement of efficiency saw the company increase its pre-tax

profits to £15.4m. Lucas turnover was hit particularly by Lockheed's decision to end the TriStar programme, which involved big purchases of Lucas equipped Rolls-Royce RB 211 engines, and the stretching-out of Tornado orders.

Despite its world renown, however, Lucas continued to be affected by recession. At the end of last year, Alan Watkins, general manager of the aerospace division, said: "Although there are some signs of recovery in passenger traffic the airline industry continues to suffer from low yields and excess capacity and we see little prospect of a substantial upturn in civil aircraft orders before 1985."

In March the company announced interim aerospace equipment sales of £125m and profits dipped before tax by £2.3m to £6.3m. Nevertheless, Lucas notched up some notable successes including an engine pod contract for the Gulfstream III won against strong domestic US competition.

Others recorded by Mr Watkins include actuators and ball screws for the Advanced

Medium Range air-to-air missiles (AMRAAM), air valves for the new Boeing 737-300, a digital electronic fuel control for the Fiat ARGO auxiliary power unit fitted to the Italian AMX fighter, electro-luminiscent cockpit lighting for the Saab-Fairchild SF 340, and engine intakes complete with electrical de-icing for the CN-235 commuter aircraft.

On a smaller but no less important scale are numerous companies providing specialized aircraft equipment. An example is Graviner, the Slough-based subsidiary of Allegheny International, which recently introduced what it claimed was the world's first microprocessor-based engine detection system.

Another giant of the industry

The system, which incorporates a single micro chip to analyse information and monitor potentially dangerous situations, is designed for civil and military use. Graviner says that malfunction is "virtually eradicated" because of the reliability of digital electronics.

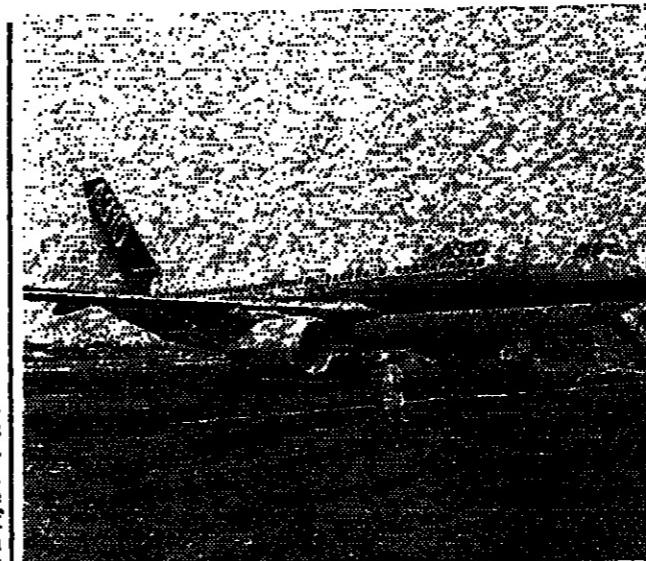
Dunlop, like Lucas, is another giant of the motor industry not always associated with aircraft systems, but which provides considerable earnings.

Dunlop's pioneering work on carbon brakes landed it the plum contract to provide an initial 100 sets of wheel and brakes for the new Boeing 757 aircraft.

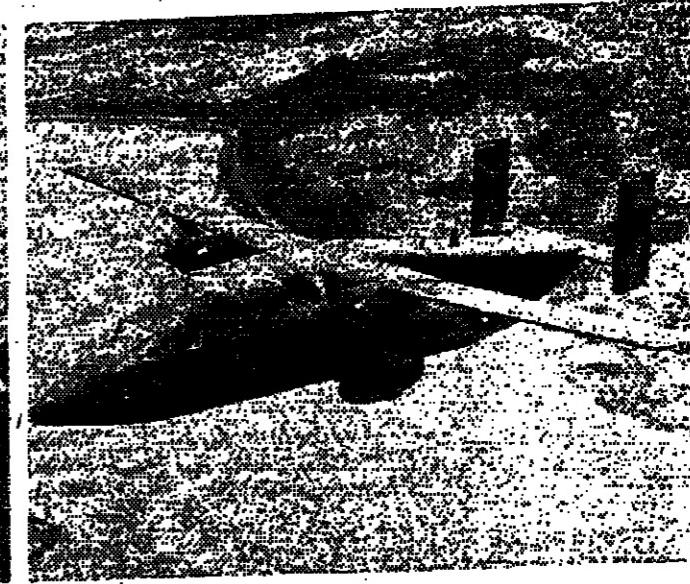
Boeing has an option to buy another 200 sets which could bring the total contract value to £200m and Dunlop is investing a total of £15m at its Coventry plant to boost capacity for the two contracts.

The company claims that while the revolutionary carbon brakes cost triple the amount of conventional steel brakes they last three times longer and are 1,200lb lighter. Dunlop is now hoping to win the brakes contract to equip the Airbus A320, the 150-seater aircraft due later this decade.

E.T.



● A310, Airbus Industrie (Europe). Product of a European consortium led by France, West Germany, and Britain, this 220-seat airliner is now proving itself in service, and is contesting sales with Boeing around the world. A long-range version, the series 300, is being developed.



● Sherpa, Short Brothers (Britain). This is the military version of the Short 330 airliner, and the first of an order of 18 was handed over last month to the United States Air Force. USAF will use the Sherpa to fly engines and other spares around its bases in Europe.

Spot the plane. Here is a cross-section of the aircraft you will see at Farnborough.

● F-20, Tigercracker, Northrop (United States). First flight of this development of the F-5 fighter was in August 1982, and the manufacturer is looking for international buyers world-wide. The aircraft is powered by the GE F404 turbofan, has improved avionics, and a Mach 2 (over 1,000mph) top speed.

● Lynx 111, Westland (Britain). Latest in the "family" of helicopters developed originally under a joint Anglo-French accord. Westland is producing Lynx 111 in both army and naval roles, and is to fit it with advanced-technology rotor

systems.

● 737-300, Boeing (United States). Powered by the US/French CFM56 engine, and due to be certified next month, the 737-300 symbolizes a trend to bring older types up to date with new powerplants and electronics. Its competitor from Europe is the Airbus A320, still in the early stages of development.

● Tomado, Panavia (Europe). Both the Interceptor version (in service) and air-defence version (being developed for the RAF) are being shown by British Aerospace partners in the project with aerospace companies in West Germany and Italy. The RAF is to

receive 185 interceptors to replace existing, aging fighter types.

● CN-235, CASA (Spain) and Nurture (Indonesia). Representative of a new generation of medium airliners made under the terms of international partnerships, the CN-235 first flew in November last year. It is a 40-seater, twin turbo prop, aimed at both civil and military markets.

● Emb-120, Brasilia, Embraer (Brazil). This 30-seat, twin-turbo-prop commuter airliner first flew in late 1983, and is now undergoing

flight testing, with initial deliveries due early next year. A number of US commuter airlines have expressed interest in a type which is likely to have a low price tag.

● Mirage 2000, Dassault-Breguet (France). The latest in a long line of Mirage planes from this manufacturer, both the 2000 Interceptor, which flew in late 1982, and the

Y-36, Hyakut (Soviet Union).

Russia's answer to the American "Jumbo Jet", the Y-36 can carry up to 350 passengers, but is believed to be range-limited at such weights. A more powerful engine is said to be under development, which should also bring the plane within new European noise rules, due in January 1986.

● Mi-26, Mil (Soviet Union). The latest product of Russia's major helicopter design bureau, the giant Mi-26 is on offer as a civil airliner, but defence observers at Farnborough will be assessing its obvious military roles.

later 2000 two-seat strike aircraft will be shown. The first squadron of 2000 is forming, while the 2000 with nuclear missiles.

● Skyship 600, Airship Industries (Britain). This is the larger version of the Skyship 500 airship which appeared at Farnborough two

years ago. Being produced at the old airship base at Cardington, Bedford, projected uses include, TV camera platform, maritime reconnaissance, and sightseeing.

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Who's flying what

These aircraft are due to appear at Farnborough. Aircraft in the flying programme are shown in bold type, while new types or variants appearing at Farnborough for the first time are marked with an asterisk.

Manufacturer	Aircraft
Aeritalia (Italy)	*AP.68-300 Spartacus
Aermacchi (Italy)	P.66 Observer
Aerospatiale (France)	MB.339A; MB.339K Vetro 2
Agusta (Italy)	*AS.220; AS.355M; SA.365M; Epsilon
Airbus Industrie (International)	AT.109A; Mi.24; *AS.355K
Airship Industries (UK)	A.129 Mangusta; AB.412 Griffon; SIAI S.211; SF.280TP; SF.600TP
Antonov (USSR)	A310
Beecraft (USA)	Skyship 500 and *600
Bell Helicopter Textron (US)	*An-72
Boeing (US)	*King Air E-90 (exhibited by LTV)
British Aerospace (UK)	206; *222B; *222UT; *400; *406 Combat Scout; 707-320C; *737-300; 146-100; 146-200; *125; 800; Jetstream 31; 748-28; Nimrod AEW Mk.3; Hawk; Tornado IDS and ADV; Jaguar; Sea Harrier
Canadair (Canada)	*CL-601 Challenger
CASA (Spain)	C-101 Aviojet; C-212-300 Aviocar; *CASA-Nurtanio CA-235
Cessna (US)	*Citation III; *C.404 Titan; *C.425 Conquest I; *C.441 Conquest II
Dassault-Breguet (France)	Mirage 2000 and *2000N; Mirage III NG and F1CR; Falcon 50; *Falcon 200; Alpha Jet; Atlantique
Max Datwyler (Switzerland)	*MD-3-160
de Havilland Canada (Canada)	Dash 7; *Dash 8; Buffalo; Twin Otter
Dornier (W Germany)	228-100 and -200
Edgley (UK)	Optica
Embraer (Brazil)	*EMB-120 Brasilia; EMB-210 Turboprop
Fairchild (US)	Metroliner II and III (exhibited by Metroliner Aviation)
FFA (Switzerland)	AS.322/264 Bravo
Firecracker Aircraft (UK)	*NDW-17 Turbo Firecracker
Fokker (Netherlands)	F.27 Martitime and Sentinel
Gates Learjet (US)	Learjet 35A (exhibited by CSE and Lucas Aero); *G.108B; *G.111; *G.112; *SRA-1; Gulfstream III
Grob Werke (W Germany)	*MT-34; Kiran II
Gulfstream Aerospace (US)	*500MC (exhibited by McDonnell Douglas)
Hindustan Aeronautics (India)	*L-56
Hughes Helicopters (US)	BD-105LS and CBS; BK.117
Ilyushin (USSR)	*MB-28
Masserschmitt-Bölkow-Blohm (W Germany)	NAC.1 Freelance; NDN-6
Mil (USSR)	Feldmeister
NDN Aircraft (UK)	*PC-21 Tigerhawk
Northrop (US)	PC-7 Turbo Trainer; *PC-9; PC-9/B Turbo Porter
Pilatus (Switzerland)	BN-2A Islander (Canton); BN-2A Islander (exhibited by Harvest Air)
Pilatus Britten-Norman (UK)	Cheyenne IIA and TV
Piper (US)	Fenestrainer 600
Rhein Flugzeugbau (MBB) (W Germany)	*SF 340
Saab-Fairchild (Sweden/US)	330; *380; Sherpa; *UTT; Skystar
Shorts (UK)	*H-76; S-76; UH-60A Black Hawk
Sikorsky (United Technologies) (US)	T67M Firefly
Slingsby (UK)	TB.10 Tobacco; TB-20
Societe (France)	Trinidad; *F3120
Sokol Conversions (US)	Cessna Turbine 200
Tirth Microplane (UK)	*Firebird FB.1 and FB.2
Trago Mills (UK)	*SAH-1
Vahmet (Sweden)	L-70 Metatrainer
Virgin (UK)	WA.116 (on indoor stand); 30; *Lynx III; Sea King HAS
Westland (UK)	Mc.5 and *AEW

For the first time, Russia is exhibiting at a British air show. J. M. Ramsden reports

Farnborough has never been without its Soviet aviation visitors, measuring and photographing the West's latest aerospace products, asking penetrating questions on the stands, and responding to toasts in the hospitable chalets. At Farnborough 84, for the first time at an SBAC Show, the Russians are actually exhibiting.

Unless Aviaexport decides at the last minute – as it did at the Paris Show '83 – to pull out, the Farnborough aircraft park will be host to three distinguished Soviet visitors: Ilyushin Il-86 big turbofan airliner; An-72 Antonov medium turbofan transport; and Mi-26, the world's biggest helicopter.

All sweetly civil, with no hint of MiG-29 or MiG-31 or Sukhoi Su-27 fighters or SS-20 nuclear missiles or Tupolev Blackjack nuclear bombers, the Russians have decided to come to Farnborough because they see the show as completely international, an opportunity to demonstrate technology prowess and perhaps to sell.

The widebody 350-seat Il-86 is the flagship of the Aeroflot fleet, in the same sort of traffic class as the American DC-10 and TriStar and a little heavier than Europe's Airbus. It is capable of long ranges, as operations to Cuba indicate, but for short hauls its economy would probably gain from the use of two big turbofans rather than the four Kuznetsov fitted.

The Il-86 may well appear soon in a re-engined form as the Il-96, but meanwhile its four slim turbofans accentuate one of Soviet aviation's greatest mysteries: when, nearly 30 years after the west's big turbofans were conceived, is Russia's equivalent?

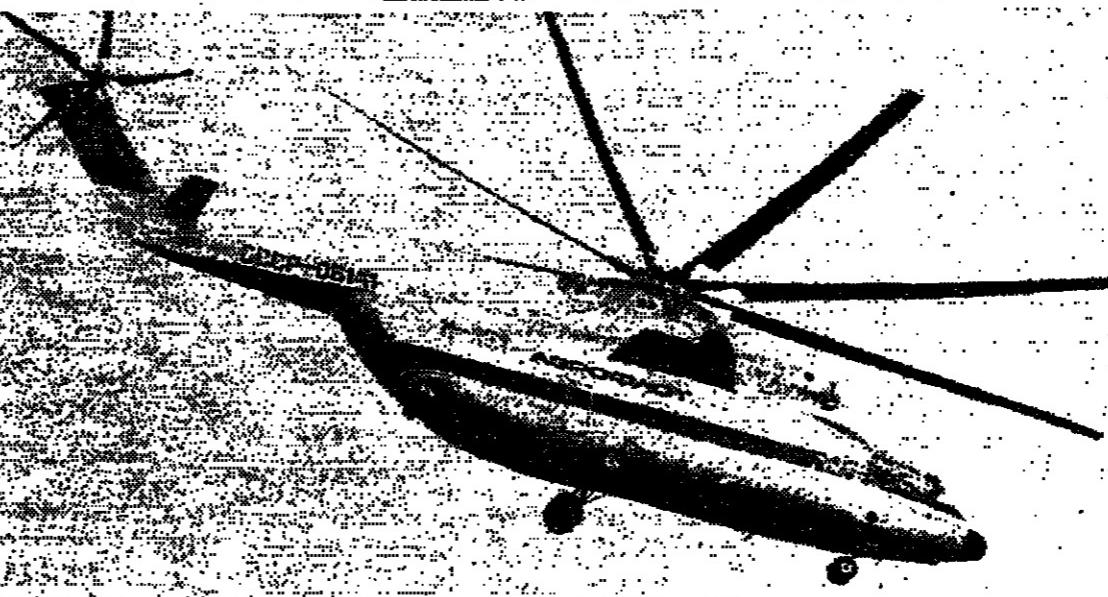
The Soviet aerospace repertoire still lacks a 40,000-50,000lb engine in the class of the General Electric CF6, Pratt & Whitney JT9D and Rolls-Royce RB.211.

Unique role

The lack of such engines has undoubtedly inhibited Soviet widebody development, military as well as civil. There have been reports in the last year that a jumbo turbofan is on test, and eyes and ears at Farnborough will be alert for confirmation.

It is surprising that a nation so proficient in space should be so deficient in big engine technology; but as anyone in G.E. or Pratt & Rolls will confirm, few products scale so many peaks of technology. Capitalist astronauts may also deduce that Aeroflot, the Soviet state airline, does not stimulate the same demand for efficiency as do competitive US airlines.

The big Il-86 nevertheless offers its passengers a convenience which no western airliner designer has yet achieved: a carry-on baggage hold below deck. Passengers enter the cabin via internal staircases, having deposited their baggage in below-deck vestibules. They collect their baggage themselves before disembarking. Some versions do not have this primarily short-haul domestic feature, which costs 6,500lb and 25 seats.



Easily the world's biggest helicopter: the Soviet Union's Mi-26

The bear has landed

The other Russian airliner at Farnborough is the twin-turbo-fan An-72, latest in the prolific Antonov family of small and large transports for cargo and passengers, military as well as civil. With two high-mounted wings (Lotarev D-36 high bypass turbofans of about 14,000lb thrust) and a 2-seat fuselage with aft-loading, the An-72 is unique both in appearance and role.

No other production aircraft has jets mounted forward of the wing, like the nacelles of propeller engines; and no forward-engined twinjets has such close-coupled thrust lines, meaning greater safety in the event of an engine failure. Nor is there any other small jet transport in the world with aft-loading doors and ramp for vehicles and containers.

The An-72's engine position has been seen on experimental western aircraft (de Havilland Stol Buffalo and Boeing YC-14) but the Russians are the first to adopt it operationally. The jet efflux passes over the upper wing surface and down over multi-slotted flaps. The so-called Coanda

effect causes the flow to attach the flaps and to produce a powerful increase in lift.

In effect the jet slipstream, like a propeller slipstream, helps the wing to generate lift even at slow speeds. This improves take-off and landing performance and safety. The problem is that, in the event of engine failure on take-off, the pilot has to cope with roll as well as yaw.

The Russians have no doubt mastered this problem, and the An-72 is technically one of Farnborough 84's most interesting visitors, although this would be disputed by the Mil bureau, designers of the Mi-26.

Also due to appear at the show, the Mi-26 is easily the world's biggest helicopter. Its colossal eight-bladed rotor, driven by two 11,400hp Lotarev D-136s, has lifted 10 tons to 20,000ft – one of five international helicopter records claimed by the Mi-26.

Its nearest western equivalent is the US Sikorsky CH-53, which is also a single-rotor machine. Another heavy-lift helicopter in this class is Boeing's

4-western certificate of airworthiness requires a manufacturer to open for inspection his design and testing and manufacturing standards and facilities. The Russians are not prepared to do this. The Yakovlev design bureau has co-operated with the American and European airworthiness authorities to a limited extent, in an effort to certificate the Yak 40 light 24-seater. But this mini trijet has still to meet US Federal Aviation Regulations and European joint airworthiness regulations (so-called FARs and JARs).

The Russians are keen to sell their aircraft to FAR and JAR countries, which include much of the Third World; but they are not yet ready to open up their aircraft design bureaux, test establishments and factories.

Until this attitude changes, Soviet civil aircraft are unlikely to become a

serious threat to western competitors. Technical virtuosity alone does not win export orders, and sometimes it does not satisfy even the captive market. Aeroflot has abandoned the much vaunted Tu-144 supersonic airliner nicknamed Concorde, for reasons unexplained. Inquiries in the Aviaexport chalet could easily jeopardise the geniality.

The Russians are relatively forthcoming about their magnificent achievements in space, in particular their long-endurance manned Salut-class spaceships. Examples have been exhibited at the Paris show and opened to the public. But there will be no hint of Russian warplanes – not even as aerobatic teams – at Farnborough, showcase of the west's latest military aerospace.

We know of several new types of fighter and bomber, mainly as a result of American spy satellite photography. Since these are released to the world by the Pentagon, which has a vested interest in America's defence budget, we have to consider the claims cautiously.

Certainly the Russians are testing an advanced new swing-wing supersonic bomber designed by Tupolev and codenamed Blackjack by Nato. It appears to be a strategic nuclear bomber in the category of America's new B-1B, though a little bigger – and much bigger than Tupolev's current service bomber codenamed Backfire.

Crowd-pullers

Two new Soviet supersonic fighters are probably now through development and in production. The MiG-39 (codenamed Fulcrum) is a single-seat twinjet fighter in the class of America's F-15.

Reports of a new Foxbat development, codenamed Foxhound and given the speculative designation MiG-31, are less reliable. But there is certainly a new Sukhoi fighter, designated Su-27, and codenamed Flanker. It is bigger than the MiG-29 and sustains the traditional competition between the Mikoyan and Sukhoi design bureaux to provide the Soviet air force with the best fighter.

If either is built in the quantities of the old MiG-21 – the world's most prolific fighter in service with many Third World air forces – the Russians will be well satisfied. Another new combat type, in action against the Afghans, is the ground-attack Sukhoi Su-25 Frogfoot. Also on test is a new giant military transport, provisionally identified as the Antonov An-400 Condor.

The contest between capitalist and communist aerospace appears to be moving into the highly intellectual area of avionics, the measure of which is hard to get with rulers and photographs at an air show.

Nevertheless, mechanical engineers and aeroplane "imbashers" are the ones who draw the crowds, which at Farnborough will have reason to be impressed by the Soviet high-flyers on display.

The author is Editor-in-Chief, Flight International



Ilyushin Il-86: flagship of the Aeroflot fleet

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New airliners for old, but where will the money come from?

according to the International Air Transport Association, the world's airlines are set to make a profit of round £190m during 1984, and a further profit of £150m next year, after returning consistent losses during the years 1979-82 which peaked at £1.4bn in 1981.

This reversal of fortunes, following the end of the recession, and the stabilizing of fuel prices, is insufficient, however, to provide the industry with the capital which it badly needs for large-scale investment in a new generation of airliners which will ensure low operating costs in the future.

There are exceptions. Airlines like Lufthansa and Swissair have managed to continue to renew their fleets during the economic downturn, but there are many other operators whose average fleet age is rising, with the result that they have higher maintenance costs, and suffer from what is known as "market resistance" - which means that potential passengers object to travelling in old jets, and take their business elsewhere.

New and stricter noise regulations at airports in the United States from January 1, 1985, and in most parts of Europe a year later, are adding to the pressures on the airlines to change their old airliners for new, and the lack of investment capital is forcing many into complicated leasing deals, so that many of the airliners in which you may fly today and in the immediate future will not be owned by the airline whose crest is on the tail, but by a consortium of international banks and finance houses.

Many of these deals contain options for the airlines to return the airliners to their real owners after five years, or even less, instead of writing them down over 15 years, as has traditionally been the case with equipment owned by the carriers.

And where the lease deals involve aircraft such as the McDonnell Douglas DC-9-30, or the Boeing 737-300, which are improvements on designs which originated more than a decade ago, it gives airlines the option of watching the progress of the new generation of airliners, and

The smaller nations in the aero race

Brazil's aerospace industry did not exist when man first walked on the moon. Today it can count four world-class aircraft of its own design and 3,000 aircraft delivered.

Embraer, the Brazilian company concerned, is celebrating its fifteenth birthday show with a military turboprop trainer so good that it has been short-listed by the Royal Air Force and adopted by Shorts of Belfast.

This sort of performance is not unique among the young aerospace industries of the South, the term aviation often used instead of Third World. Aerospace design capability can be claimed by Argentina, India, Indonesia and Israel.

Other countries have competent aerospace industries, and do not consider themselves South or Third World: Australia, Canada, China and Japan. The smaller European countries can also claim aerospace competence, though only Britain and France possess complete industries. Among the most original of the small Europeans are Poland, Romania, Spain, Sweden, Switzerland.

The "rest of the world" aerospace industry is difficult to define. A little country like the Netherlands holds the European record for airliners sold (700-plus Fokker F27s) while a huge country like China has yet to

export a plane of its own design. So we shall look at the countries which, like Brazil, have succeeded in threatening the markets of the aerospace big powers with aircraft of their own design.

They all share a common worry, which is accentuated by the continuing failure of West Germany and Japan to catch up the complete aerospace industries of the United States and the Soviet Union, and even those of Britain and France.

Whatever may be the measure which places Germany and Japan among the industrial world leaders, it is not aerospace. Both countries have sought to catch up by massive investment, mostly in design co-ops and licence agreements with the Americans, British and French, and by buying in engines and equipment. This method has been used by the other outsiders, some of whose taxpayers must be wondering when the costly industrial student will ever fly solo.

Some of the poorer nations have invested billions in the most advanced western machine tools - to cut under licence components which were outdated in the market 10 or 20 years ago. This is leading to disillusionment, especially in countries whose debts to the west have already become

unrepayable. Meanwhile every year the technology gap between the West and the rest becomes wider and wider.

Japan, which has flooded the world with its cars and consumer technology, has sold a few VS-11 light transports (with Rolls-Royce Dart) outside its domestic market, and a respectable quantity of Mitsubishi business aircraft (with American engines). But that is all. The country's airlines and air forces are almost wholly United States-equipped.

West Germany's Dornier has exported a respectable number of Skyservant and 228 light transports, but the country's airlines and air forces are almost wholly equipped with American aircraft. If the Ger-

mans and the Japanese cannot make it, some of the poorer aerospace aspirants might ask, what hope is there for us?

But they persevere. The emerging aerospace nations come to Farnborough and say in so many words: "Yes, we know that what we are trying to achieve is costing us the earth. We know that we'll probably still be buying from American, European or Russian aerospace shelves in the twenty-first century. But we shall never master our social and industrial backwardness until we master modern technology".

Argentina: The twin-turboprop battlefield-support Pucara showed its tough fighting qualities during the Falklands war. In happier days the aircraft was shown at Farnborough with the help of Germany's Dornier, the Argentine industry is developing a jet trainer.

Australia: Production of the Nomad light utility transport ends this year with only just over 100 sold. It has performed well in a competitive market.

Australia hopes to win an RAF order for its W.20 Wamira turboprop basic trainer, due to be at Farnborough. If successful the Wamira will be Westland-built.

Brazil: In addition to the Tucano, also contending for the RAF trainer order, the Brasilia light airliner will be strongly presented at Farnborough. Embraer's successful Bandeirante light transport gives the Brasilia a good pedigree, as does

the Xingu VIP twin (chosen by the French defence ministry).

Canada: the de Havilland company's successful family of light transports will be sold hard at the show. The latest, the 34-seat Dash 8, will do well to outsell the 20-seat Twin Otter (800 delivered) in the hotly contested commuter-liner market.

The four-engined 50-seat Dash 7 has scored an orderbook of 150. Like many competitors of all nationalities, the de Havilland family is powered by Pratt & Whitney Canada turboprops.

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This would continue the trend of the airline industry to favour smaller "packets" of passengers at higher frequency of service, which has become apparent during the past two years. Although Boeing has extended the upper deck of its 747, it now appears unlikely that the 600, 800, even 1,000-seaters which were canvassed only a few years ago will materialize in the foreseeable future, although the British Airports Authority is probably wise to build stands to take such monsters into the new Terminal Four at Heathrow, due to open for service next year.

Meanwhile, the airline industry as a whole is enjoying a vintage year for business, and particularly in the cargo sector. The weak pound against the US dollar has had the effect of filling transatlantic airliners to capacity with both people and air freight, and the result of that has been to harden fares and rates - although it is still possible to obtain

such a trip across the Atlantic.

Specialist operators such as KLM, Pan Am and Virgin Atlantic, and their successors and descendants, Freddie Laker, and his low-fare drive of the 1970s.

But although it is doing better, air transport still has not emerged from the effects of the turbulent economic weather through which it has been flying.

General of IATA, said recently that there was "still a long way to go" before it achieved the sort of results expected of other major industries. He warned that the airlines will have to spend £130bn between now and 1993 on new aircraft, space, and other fixed assets, pointed out that they are still owed £550m in blocked currencies by countries, mostly in Africa, and said he saw a danger that the government in the United States gave up the regulation of the industry, this role would increasingly be taken over by the courts.

AIR

produced the Astra. The West wind has had a significant run in the US market, though sales have slowed by recession.

Indonesia: The CN-235 commutinert, a 40-seater with aft-loading doors, is being designed and built by Indonesia's Nurtonio in partnership with Spain's CASA, parent of the successful 212 thirty-seat DC-3 replacement - which Nurtonio builds under licence. Though burdened by heavy debts, Indonesia has a huge domestic market for the CN-235.

Poland: PZL-Mielec is building Russia's Antonov An-28 light turboprop 20-seat transport under licence. Poland's most notable design is the TS-11 Iskra light jet trainer.

Romania: The British One-Eleven production line has been taken to Bucharest by Romania's ambitious industry, which is building the airliner for home and export markets. Only a shortage of funds is holding up re-engineering with Rolls-Royce Days in place of Speys. The Romanians also have the IAR-90 jet trainer.

Sweden: The ability of this small country to design and produce world-class fighters, albeit with American engines, continues to impress. The latest supersonic Swedish fighter, due to replace the formidable Viggen, is the JAS-39 Gripen. Saab has also joined US Fairchild to design and produce the 340, first of the new-generation commuter-liners to enter service.

Switzerland: Pilatus, owner of Britten-Norman and its successful Islander family, is at Farnborough with a contender for the RAF trainer order. JMR



Boeing 747s and 767 at the company's Washington plant.



Two of the young aerospace countries show their aircraft: above, Indonesia's CN 235, and left, Brazil's Bandeirante, Xingu and Tucano.

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THE TIMES

FINANCE AND INDUSTRY

Executive Editor Kenneth Fleet

Rebuilding investment after the debt imbroglio

In three weeks the cream of the international financial world will gather in Washington for meetings of the International Monetary Fund and the World Bank. At the London economic summit, the leading countries will be most concerned with damage limitation.

Much will be heard of the need to protect the international banking system from the perils of the second round of the international debt imbroglio, so that economic recovery may be safeguarded as it spreads from the United States through Europe and the Far East to complete its virtuous circle among the developing countries.

There will be plenty of self-congratulation about the successes of the case-by-case approach to debt rescheduling, which has helped to dissipate the aura of crisis and leave the balance sheets of international banks with a veil of credibility.

Bankers, ministers and officials will discuss at length the correct combination of stick and carrot required to persuade recalcitrant debtors to come into line and accept the IMF and bankers' condition of harsh domestic deflation in return for more permanent and sustainable debt service agreements. They will point to success stories like Mexico, whose cathartic adjustments have rehabilitated its economic pride and potential. They will make concessions on terms to the combined bargaining power of Latin American countries to head off any residual temptations to renege or formally default.

Last week's annual report from the United Nations Conference on Trade and Development (Unctad), a collective lobby for developing countries, presents, by contrast, an almost unrecognizable version of the same situation.

The picture it paints is of a slump that has been amplified in developing countries, followed by a recovery that promises instead to be dissipated by the peculiarities of commodity markets, protection and the reversal of normal capital flows.

Last year, as the developed world set out on recovery, Third World output fell by 1 per cent, the third annual fall in output per head for many developing countries, though there are striking divergencies between different groups.

The outlook for 1984 and 1985 is not particularly bright, reports Unctad. Moreover, prospects that increases in export earnings will be translated into higher levels of imports and higher rates of growth are considered to be remote, owing to a likely stagnation, or even decline, in net financial flows to developing countries.

That is the crux of it. The amplification of depression in developing countries is nothing new. The logic bears some hallmarks of the problems of outlying regions of developed countries. Fails in the prices of primary export commodities determined on free markets are exaggerated by the insensitivity of demand to price changes, prolonged, in the current phase, by the continuation of high anti-inflationary interest rates straight through to the recovery phase without any noticeable break.

The concentration of rapid economic growth in the United States is certainly inconvenient for primary producers who rely far more on exports to resource-hungry Europe and Japan. Unctad would like to see the US cut its budget deficit to help interest rates while Europe and Japan raise their spending - an unlikely prospect.

But it is the financial repercussions that make the real difference. The debt crisis, set off by the effect of high and rising interest rates on variable rate debt contracted through banks since the oil price explosion of 1973 has not merely landed many countries with debt service payments they find hard to meet. It has consequently led bank lending to dry up as banks' fears for their own balance

sheets coincide with their sensible doubts over borrowers' ability to pay.

Last year, non-Opec developing countries made net repayments of \$13 billion to banks, representing a startling reversal of the historic trend of capital flows as well as savage domestic retrenchment.

To make matters worse, attempts to alleviate this squeeze by boosting exports on the back of IMF-imposed devaluations are among developed countries already encountering resistance among developed countries in the form of quotas or accusations of dumping.

The Unctad report concludes sweepingly, if familiarly, that "the continuing critical situation in many parts of the developing world is linked to basic weaknesses in the post-war systems of trade and payments that call for its reordering and restructuring". It is noticeable - and a worrying precedent - that countries like India less closely bound up in the world economy have fared better than more open Third World countries.

Such all-embracing calls to change the rules when they start to hurt are not likely to carry much weight in the developed world or enhance Unctad's already shaky reputation for practical realism. After all, the pleas of six of the top seven economies, the European Commission and the IMF show no sign of having any effect on United States domestic fiscal policy - the immediate cause of high interest rates.

Countries such as Britain which have been through relatively drastic anti-inflationary adjustments know they are a necessary response to slack financial disciplines and self-defeating price instability, not merely an unfortunate aspect of the international financial system.

Newly industrialized countries in the Far East have managed to come through the maelstrom by their own efforts with stronger trading positions and enhanced credit-ratings.

Whether overborrowing by Latin countries and others was more the fault of their own governments or international banks may be argued indefinitely. Neither complained of the unprecedented funds made available by private sector recycling of Opec surpluses - although some Opec countries are now prominent among the critics.

That money would not have been forthcoming to finance unprecedented development in the 1970s at anything but the variable rates at which the banks were obliged to borrow.

Unctad's complaints do, however, raise two important issues for the long-term future of many developing countries and for the world economy as a whole. One, familiar in Europe a couple of years ago and still unresolved, is how to cope with the destabilizing interaction of widely fluctuating exchange rates, exchange rates floating in a sea of hot money and the consequent trend to manage trade through quotas.

The other concerns the future shape of capital flows to the developing world. From the old colonial empires to the nineteenth century build-up of the United States, capital to finance investment has traditionally flowed from established financial centres to economically newer territories which offer greater prospects, risks and returns.

There have been temporary interruptions in previous financial crises. Sounder domestic policies to foster greater savings, particularly in Latin American countries would help. But it would be illogical to seek to reverse the historic pattern of capital flows and unlikely that voters in developed countries would put with the extra imports needed for developing countries to balance their trade.

Graham Searjeant
Financial Editor

THE GILT-EDGED MARKET

July lessons for monetary policy

Gordon Pepper

My overall assessment of the prospects for the gilt-edged market remains the same as that expressed in the first of these articles in January.

The British forces associated with an upswing of the business cycle will be muted in the United Kingdom but exaggerated in the US and, if the dollar stays firm, there is bound to be upward pressure on British interest rates when US rates are rising again.

In my judgment, and in spite of the 1½ per cent fall in US bond yields since the end of May and the recent evidence of a slowdown in US economic growth, the US bear market is not yet over.

The crucial question for our market is the extent to which we will be able to avoid following US rates upwards. The lessons from July in this respect are ominous, as regards both the pressures which were allowed to develop and the way the authorities reacted.

The Governor gave a detailed account of what happened in July in an important interview with Sarah Stagg in *The Times* on August 22.

He confirmed that "present policy is, and has long been, to put primary emphasis on the achievement of monetary targets and to allow sterling to find its level in the markets".

He also claimed that there is no target for the exchange rate,

although the authorities "do take into account in interpreting the monetary aggregates what sterling's behaviour tells about domestic monetary conditions".

The Governor reiterated the authorities' judgment that "the domestic monetary situation was then, and is now, satisfactory" and that "there was no case for a rise in interest rates" in the domestic monetary situation.

It is important to note that this judgment was made in the knowledge of sterling's weakness and the bad data for the money supply which were published in July.

Why then did the authorities raise interest rates by no less than 3 per cent? The Governor's answer was:

"It was impossible to resist the market pressure that was then developing... There was such a strong move in the markets that failure to act would have been dangerously misunderstood. It would have been seen as indifference to counter-inflationary policy, and the credibility of monetary policy."

With the benefit of hindsight it is clear that the trouble in June, when United States short rates rose rapidly and those in

the market quickly and decisively on

Lloyds Bank may link with Scrimgeour Kemp-Gee

By Christopher Dunn

Lloyds Bank emerged last night as a possible suitor for Scrimgeour Kemp-Gee, the leading London stockbroking firm, after weekend reports linked Scrimgeour with Citicorp, America's largest banking corporation, in a \$250m deal.

A spokesman for Scrimgeour, which this year ranked top for British research in the annual Continental Illinois stockbrokers' survey, confirmed that the first had held talks with Citicorp.

He stressed, however, that these formed part of a range of discussions with a number of financial institutions, including Lloyds Bank and Schroder Wagg.

He also dismissed the \$50m takeover valuation as a shot in the dark.

"We have been talking to a lot of people for a long time now, and we have narrowed the list down to a shortlist of perhaps three names. An im-

portant partners" meeting is likely shortly to thrash out all the details of any deal. We hope to make an announcement in the near future. But the situation is still very fluid."

But he added that it was perhaps inevitable in the present climate that the firm should lose its independence.

Early this summer, it is understood that it prepared a mini-prospectus of its broking strengths, in conjunction with merchant bankers Baring Bros, which was then circulated to a small number of possible suitors.

Scrimgeour has 70 partners, of which 37 have an equity stake.

& Wagg, involving former Panmure Gordon partners.

This appeared to set Schroder on a course of development which excluded links with existing stockbroking firms.

Last night, a Lloyds Bank spokesman would neither confirm nor deny the possibility of

a Scrimgeour link. "We never comment on rumours," he said.

Lloyds Bank, whose chairman is Sir Jeremy Morse, is the only one of the big four not to have arranged a broking link so that any deal with a first-class firm like Scrimgeour would make excellent commercial sense, assuming the bank had opted to follow the other clearers into setting up broking-jobs links.

Any speculation surrounding a possible Lloyds-Scrimgeour link emphasizes that an intense poker game is now building up in the London market between the three first division stockbroking firms which are still independent - Scrimgeour, Phillips & Drew and Cazenove - Lloyds, which has still to make an investment.

Such is the volatility of the present situation that come claim a merger between Phillips and Drew and Cazenove cannot be ruled out completely.

Chubb set for battle

Chubb, the lock and safe manufacturer, has promised "robust" rejection of Rac Electronic's £140m takeover when it issues its formal defence document this week.

Talks will take place today and tomorrow between Chubb's directors and its financial advisors, County Bank, on whether to include in the document a profit forecast for the year to the end of next March or to reserve this traditional defence ammunition for a later stage.

STOCK EXCHANGES

Change on week
FT-SE 100 Index: 1103.9 up 16.7
FT Index: 855.7 up 16.9
FT Gilt: 79.75 down 0.01
FT All Share: 520.47 up 17.36
Bargains: 19.346
Datastream USM Leaders Index: 102.04 up 1.01
New York: Dow Jones Industrial Average: 1217.64 down 12.15
Tokyo: Nikkei Dow Jones Index 10,584.20 up 30.1
Hongkong Hang Seng Index 928.75 up 33.03

BOARD MEETINGS

TODAY: Interims: Arrow Chemicals Holdings, Automotive Products, EIS Group, Electro-protective, Hawley Group, Insight Group, Jersey Electricity, Kean & Scott Holdings, Macfarlane Group (Clansman) (amended), J. N. Nichols (Vimto), Wace Group.

FRIEWS: Consolidated Plantations (amended), London & Garmon Investment Trust.

TOMORROW: Interims: James Beattie, Brook Street Bureau, Derek Crouch, Federated Housing, Kleinwort Benson, Lonsdale, Lambert Howarth Group, Metal Closures Group, Nordin & Peacock, Proctor Financial Group, Robinson Brothers (Peters Group), Richard Sharp & Fisher, Connolly Wilson Holdings. Finals: Cantors F Copson, David Dixon Group, Land Investors, Raigan Property Trust, Ricardo Consulting Engineers.

WEDNESDAY - Interims: BICC, Canadian Roads Holdings, Guardian Royal Exchange, Keppel Lineard, P & O Pleasants, Reckitt & Colman, Sun Alliance and London Insurance. Finals: Estates Property Investment Co, Framlington Group, Minerals Oils and Resources Shares Fund Inc, VV Thirteenth.

THURSDAY - Interims: AC Cars, Anglo American Gold, Benson Crisps, Booker McConnell, Bracken Mines Bridon, BP, Bunzl, WM Collins, Cookson Group, Fredland Doggett, Hayters, Hepworth Ceramac, KCA Drilling, Kinross Mines, Ladlow Group, Leslie Gold Mines, New England Properties, Pantos, Sedgwick Group, Unilever Gold Mines, Waddin, Winkelhaak Mines.

FRIDAY - Interims: Coal Petroleum, Kode International, Pearson, Stewart Wright Holdings, Tavener Rutledge. Finals: Haynes Publishing Group, Samuel Heath & Sons, Sheldon Jones.

CBI survey finds output expanding

By Our City Staff

Financial markets mark time

From Maxwell Newton
New York

The focus of attention in the financial markets is increasingly on the Federal Reserve. Until there is a crack in the Fed's present restrictive policy, it is unlikely the rally in bonds and stocks will continue, or that the dollar will decline.

Since the middle of May, the "adjusted monetary base", banks' reserves and currency, has hardly changed. In mid-May the monetary base was more than \$212 billion (£161 billion) in the week of August 29. It was \$212 billion in the latest.

This freeze on banks' reserves has led to a freeze on money growth. Between the week of May 21 and the week of August 20, the level of money M1 has risen from \$45 billion to \$547.9 billion. There has been little movement in the money stock for three months.

The impact of the freeze on banks' reserves has been more striking than those held aggregates might suggest. Since the second week of May, the level of banks' borrowings from Federal Reserve banks has risen from just over \$1 billion to the latest reading of \$3.36 billion in the week of August 29.

Of that increase of about \$7.5 billion in borrowings from Federal Reserve banks, virtually every cent has gone to the support of the troubled Continental Illinois Bank.

So in the last three months there has been a substantial decline in the reserves available to the banking system, excluding Continental Illinois.

Since the end of May there has been a strong increase in the interest rate on federal funds, the overnight money traded between the banks. Funds were trading below 10 per cent at the end of May. Today they are trading at about 11½ per cent.

In line with the rise in funds, there has been an increase in the yield on short-term Treasury bills. The yield on 90-day Treasury was 9.7 per cent at the end of May. Now it is 10.6 per cent.

Short-term interest rates have risen despite the decline in all bond yields. The yield on long-term treasury bills has fallen from 13.8 per cent at the end of May, to 12.4 per cent now.

This has not affected the short end of the market, where the Fed's policies are having an impact.

British manufacturing output in the second quarter may have continued to expand despite the miners strike and in contradiction to the output trends in official figures, according to the Confederation of British Industry.

It paints an encouraging view of the economy in its latest regional report also pointing to continuing rising orders and activity. The report concludes that government figures, which show a ½ per cent fall in second quarter output, after growth in January and March, may well be revised later.

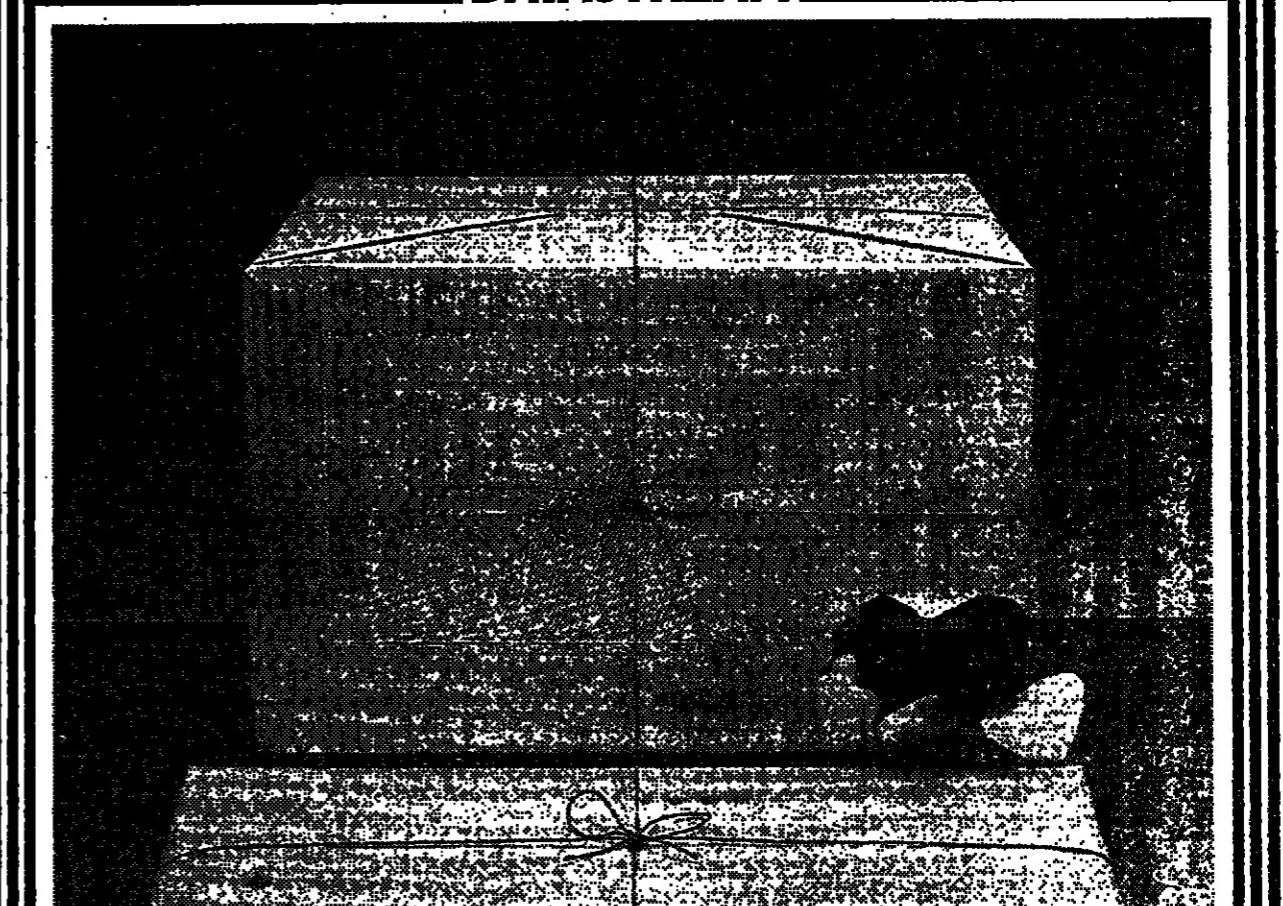
Investment is also forecast to contribute heavily to the recovery. This year, manufacturing, housing, North Sea and other private investment are forecast to grow by more than 10 per cent each in volume terms.

Investment growth also depends heavily on renewed increases in consumer spending. But the survey does not rule it out, given that a low inflation rate - no significant upward trend is forecast - should help to boost the personal sector's real offer - tax, income.

For 1984 as a whole, British output could grow by an average of 2 per cent: further growth of some 3 per cent is expected next year. The average measure of GDP should expand by about 2½ per cent this year, and by some 2½ per cent in 1985.

The survey indicated continuing steady recovery in manufacturing, although the

DATASTREAM



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THE TIMES
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STOCK EXCHANGE PRICES

Capitalization and week's change

ACCOUNT DAYS: Dealings Begin, Today. Dealings End, Sept 14. 5 Contango Day, Sept 17. Settlement Day, Sept 24.

Forward bargains are permitted on two previous days.

(Current market price multiplied by the number of shares in issue for the stock quoted)

THE TIMES

Portfolio

DAILY DIVIDEND £2000

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No.	Company	Year gain or loss
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2	Brown Shipley	
3	Gunnells Peat	
4	Clart J Rothschild	
5	Anschutz (Henry)	
6	King & Shaxson	
7	Stard Chart	
8	Humbera	
9	Savoye M	
10	Finsen	
11	Bearson	
12	ELECTRICALS	
13	AB Elect	
14	Electra Lighting	
15	MK Elect	
16	Plessey	
17	Alden Elect	
18	Patent Elec	
19	Oreco	
20	Ward & Goldstone	
21	System Designers	
22	GEC	
23	PROPERTY	
24	Aps	
25	Centrovent	
26	Jervon	
27	Br Land	
28	Cap & Counties	
29	Riochamber	
30	Brixton	
31	Slough Estates	
32	Beazer (CH)	
33	Estates Prop	
34	OIL	
35	Amil	
36	Charterhall	
37	Tricentral	
38	Br Petroleum	
39	Petronas	
40	British	
41	Aras Energy	
42	Br Bowen	
43	Shell	
44	Bristol Oil	
45	Year Daily Total	

Weekly Dividend						
Please make a note of your daily totals for the weekly dividend of £20,000 in Saturday's Newspaper.						
MON	TUE	WED	THU	FRI	SAT	Weekly Total

BRITISH FUNDS

Banks and Building Societies

Price last Friday

Chg's on week

Int. Cross Div Yld %

P.E.

Stock

Last Friday

Price last Friday

Chg's on week

Int. Cross Div Yld %

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Last Friday

FOOTBALL: INCREASED INCENTIVE FOR VICTORY HAS LITTLE EFFECT ON CLUBS

Almost half already in their rightful place

By Stuart Jones, Football Correspondent

It was Newcastle United's weekend. After three matches they head the first division and the man who led them there, Jack Charlton, is tall enough and honest enough to keep his feet on the ground while he touches the heights.

He admits that his team are "lacking in quality" and that if they find themselves in trouble, they "just hump it". His description covers not only Newcastle. It stretches far across the first division.

As the spread of talent grows thinner, so realistic expectations of finishing within sight of the summit become more limited. The season is far too long and far too competitive for those clinging to false hopes to hold on. But, after only four hours and a half, almost half of the 22 clubs have already found their rightful place.

In spite of the increased incentive for a win, a mere handful will rise or fall dramatically during the next 39 fixtures. Since the new rule was introduced in 1981, an average of only four clubs have either gained or lost 10 or more places between the publication of the first and the last official tables.

Old firm are poised to challenge

By Hugh Taylor

Impressive displays by Celtic and Rangers brought hope to their worsted teams that a sterner challenge will at least be presented to Aberdeen, who appeared to be running away with the premier division championship.

Celtic won their first league victory by beating Morton 5-0 at Parkhead. In ruthless mood, the home team beat the luckless Greenock side, realising what was happening they found themselves four goals down. McCarver, the forward who had been floundering in the early season games, regained all his old sparkle, scoring two goals and playing a big part in the others scored by McClair (two), and Grant.

Rangers revealed, at Dens Park, where they beat Dundee 2-0, that their new blend is becoming more potent. In an exciting game, the former Dundee players Ferguson and Rossford, scored twice for Rangers. Aberdeen, however, maintained their 100 per cent league record and their 4-1 victory over Hibernian proved that they will not easily be dislodged from the leading position.

Well-taken goals by McKinstry, Simpson, Black and McDougal did nothing to restore the fortunes of Hibs who missed several good chances in the first half. Their manager, Pat Stanton, was ordered from the touchline by the referee after an outburst to a linesman. The Hibernian goal was scored by Jamieson.

If the agony of Hibernian, knocked out of the league cup by lowly Meadowbank, continued, the luck of St Mirren changed dramatically. They had a splendid 1-0 win over Dundee United at Love Street and redeemed themselves in the eyes of their supporters for their midweek defeat by Cowdenbeath in the league cup.

The goal scored by McAvinnie may have been controversial, as United claimed off-side, but St Mirren made the visitors, who are felt by many to be the country's most attractive team, look ordinary. With the exception of the defeat, United's hopes of winning the title have taken a blow. A goal by Park gave Heart of Midlothian a lucky win over courageous Dunbarian at Tynecastle.

Meanwhile, the Scotland manager, Jock Stein, will today announce his party for the international with Yugoslavia at Hampden Park a week on Wednesday. Although Souness has received permission from Sampdoria, of Barcelona, being available, but there could be a recall for Hansen, the Liverpool defender who has been out of favour for more than a year.

Coventry's cage

Coventry City, who had hoped to erect a fence around their pitch in time for their next home match following Saturday's pitch invasion by supporters during the game with Leiceseter City, now say it will take at least 12 weeks for the work to be completed. The club, who were the first in England to have an all-weather stadium, are now also planning to remove the seats from the Spion Kop end of their ground.

This was a match of some excitement but precious little quality. Ipswich, until Sunderland's arrival, were painfully out of touch, with nerves breaking down almost before they had started. United, too, have still to get their act together. Robson was less influential than usual, while Black's nightmare continues.

The enigmatic Scottish forward has looked a square peg in a round hole since leaving Ipswich early last year. Admittedly he was denied a decent service on Saturday but the sharpness and assurance which he used to display regularly at Portman Road have gone. Black was unable to make amends for a bad miss in the first half as an ankle ligament injury led to his withdrawal at half-time. The loss of Whitehead another opportunity to stake a claim for the captaincy.

Ron Atkinson's two other recent signings, Strachan and Olsen, worked hard but their overall contribution fell short of what is expected of them. Strachan's game is based mainly on energy but even he began to flag in the second half. O'Farrell was disappointed that he failed to accept at least one of two reasonable chances that came his way.

Ipswich were a match of some

decade ago and few listened even then.

The violence at the Victoria Ground was provided by one of the hosts. Dyson was ordered off after greeting Chapman, a former Stoke City player, with a particularly unfriendly gesture. Had Stoke had their way, the game itself would have been called off because several of their representatives were suffering from influenza.

Although Davenport scored

all three of Nottingham Forest's goals, the country's most accurate marksman so far is Wilson. He added another three to the four he collected for Derby County during a Milk Cup tie in midweek. Byrne is the fastest, Newcastle United's manager for 10 weeks, three wins out of three even if he cannot always remember the names of his players.

Coventry's game was less than two minutes old when the pitch was taken over by some 300 fighting idiots. Bobby Gould, Coventry's manager, appealed to them over the public address system "Football is in trouble" he said, "and there will be even more trouble if this goes on". His words might have been an echo of a

lengthened version of the Super League will be almost complete.

Lorimer is the oldest. At the age of 37, he helped Leeds United to take their expected place at the head of the second division. If they are promoted with two other potentially powerful clubs, such as Birmingham City, Portsmouth or Wolverhampton Wanderers, as an

understandable caution.

Equally understandable was his pride of Waddle, scorer of two goals and maker of a terrible mistake, he said once, twice and probably a third time. "There was a question mark about whether Waddle and Beardsley would manage without a big taller man and they're doing beautifully". What about the others? Big Jack was asked. "Our left-sided player - what do you call him? Yes, Wes (Saunders). And Gary McDonald" (his name is Neil, Jack) Everybody, he said, had done their best.

Charlton has inherited from Arthur Cox a team thought by many to be too inexperienced to stay in the first division. Keegan has departed, McDermott is in dispute and waste to leave and McCreery is the only one left with a premier league background. Charlton has bought nobody and, for the moment, sees no urgency to do so. There are, however, both the first division's only 100 per cent record and, goodness me, seven points clear of the relegation zone already.

It was certainly nerve-jangling stuff for both sides after Rangers had sneaked upfield in the 47th minute to pincer the points, or so we thought. Bannister touched on a chance through ball and the electric Freyday, who was unphased by the surroundings, zipped in between the hesitant Neal and Grobbelaar to score.

Beardsley, who had boldly promised that Rangers would not string men along the back line now saw his plan going just that, though you could hardly blame him. It was anyway, it was doubtful whether they had any choice in the matter.

They had the fine line of offence with amazing agility and consistency considering the sharpness of Welsh, who scored two offside goals in a minute - though had Rush been there I feel the trap would have been sprung.

It needed a shade faster release from midfield and Molby, with a little more urgency, has that necessary touch, a delicate one for such a tall, heavy man. Liverpool had the better of the first half, for example the elegant Gillespie and the natural right-back, Nicol) for there to be any panic, and the only threat of subsidence on Saturday was beneath the packed Kop terraces when Whelan's excellent strike went tumbling down the seven minutes remaining.

IPSWICH TOWN: M Green, G Surley, S McCaffery, B Grobbelaar, N Neal, A Keegan, M Lawrie, R Wilson, J McLevy, S Lee, P Wilson, J Werk, J McEvilly, C Doherty, P Hickey, P Hudson, W Hall, J McCreery, J Murphy, P Ferguson, S Woods, S McAllister, G Macmillan, M Flory, G Barrington, G Stratford, J Gregory. Referee: T Mills (Barnsley).

MANCHESTER UNITED: M Brown, J Ryan, S Carr, P Clegg, J Wilson, C Whittle, P Edwards, D McCreary. Referee: M Dry, G Williams, C Gibson, A Morrison, S McAllister, D Bryan, M Waters, P White, G Cowans, D Mortimer. Referee: D Richardson (Great Harwood).

Anfield's foundations as strong as ever

By Clive White

LIVERPOOL.....1**QUEEN'S PARK RANGERS**.....1

There you are, another crack in the foundations you could almost hear them surveying outside the Anfield citadel as Liverpool dropped their first home point of the season. Those of us privy to the new news differently, we were watching the cornerstone of a new Liverpool that may prove strong enough to hold on to at least one of their prized possessions - the championship.

"That was more like the old-fashioned type of Liverpool," said old-fashioned Joe Fagan, their manager, as the new faces, Walsh and Molby, blended another degree into the Liverpool picture. "If we get playing like that we might even get better."

Such words are praise indeed from the honest Fagan, a man who likes to keep things simple ("The ticket from Marks and Spencers, you know"). He still had the dipper to admire the opposition and particularly the uncomplicated approach of Alan Mulroney, his counterpart at Rangers but not I think a fellow customer of Marks and Spencer's.

Mulroney said: "I told them fiddle the team talk. You're at Liverpool,

it's not about what you do, it's about what you are. We're here to win the championship."

It was a match of two halves indeed for the two sides after Rangers had sneaked upfield in the 47th minute to pincer the points, or so we thought. Bannister touched on a chance through ball and the electric Freyday, who was unphased by the surroundings, zipped in between the hesitant Neal and Grobbelaar to score.

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Shrewsbury United often have a dramatic effect on the outcome of matches, such as was the case at Portman Road on Saturday when Bobby Ferguson, the Ipswich Town skipper, sent on Alan Sutherland for Kevin O'Callaghan midway through the second half.

Ipswich were a goal down and lucky not to fall further behind before Sunderland's entrance transformed the game. The Ipswich attacks previously predictable and laborious, immediately began to carry more threat and Manchester United, who were in front without having scored, suddenly found that they had a fight on their hands.

It was Sutherland who equalised with a flying header in the seventh minute after Gates and Punney had combined well on the left and United's defence was looking distinctly wobbly by the finish as Sunderland (twice), Punney and Burley all came close to snatching a winner for Ipswich.

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excitement but precious little quality. Ipswich, until Sunderland's arrival, were painfully out of touch, with nerves breaking down almost before they had started. United, too, have still to get their act together. Robson was less influential than usual, while Black's nightmare continues.

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Ipswich were a match of some

Kings of jungle - for the moment

By David Powell

NEWCASTLE UNITED.....3**ASTON VILLA**.....0

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Aston Villa may be slightly larger prey than Leicester City and Sheffield Wednesday. Newcastle's first victims since they returned to the first division, but their next steps take them deep into the jungle, to Highgate, tombs and Old Trafford. Sunday, "if we're in the top five or six after these two matches then we'll have proved something". Charlton said with understandable caution.

Equally understandable was his pride of Waddle, scorer of two goals and maker of a terrible mistake, he said once, twice and probably a third time. "There was a question mark about whether Waddle and Beardsley would manage without a big taller man and they're doing beautifully". What about the others? Big Jack was asked. "Our left-sided player - what do you call him? Yes, Wes (Saunders). And Gary McDonald" (his name is Neil, Jack) Everybody, he said, had done their best.

Aston Villa will be almost complete.

Leading the Canon sponsored League after three matches can be as meaningful as ending day one of a safari expedition with no more than the head of a monkey for stuffing. Small scalps, however, are better than none, especially when the chief hunter is not fully acquainted with his men and Jack Charlton, Newcastle United's manager for 10 weeks, three wins out of three even if he cannot always remember the names of his players.

Other likely to climb 'up significantly are Watford, Everton and Manchester United. Newcastle, West Bromwich Albion and Coventry City, who are as likely to drop down, might recall that Manchester City and Swans City lay first and second at this stage three seasons ago. By the following May, both were relegated.

Coventry's game was less than two minutes old when the pitch was taken over by some 300 fighting idiots. Bobby Gould, Coventry's manager, appealed to them over the public address system "Football is in trouble" he said, "and there will be even more trouble if this goes on". His words might have been an echo of a

lengthened version of the Super League will be almost complete.

It was the violence at the Victoria Ground as the hosts in

the second half they lost Cooke, their captain when the strapping over a damaged knee came adrift and the injury - a damaged tendon - proved troublesome. Cooke is confident that he can play through the injury, the selectors will hope it is right since he is a contender as player and captain this busy international season.

With Woodhouse under pressure to set piece ball and receiving little loose ball the best was not seen though Harlequins' backs, though Thompson, swaying higher and higher, worked space when he could. But he could not smash the shimmering Avocados who played most of his 21 internationals as wing but carved through the centre at Twickenham in classical manner. The French Barbarians, paying tribute to the memory of Lord Wakefield, brought a side worthy of an international: eight of them members of the 28-strong party which will tour Japan later this month, while four more, including Rivers, the captain, were senior internationals of some standing.

Much of the game, however, emphasized a basic difference between English clubs and sides from abroad. The French, savvier and better looked for space, how did not mind running double back into the exposed parts of the field and losing possession in the process, a sight which will hardly have gladdened the heart of Derek Morgan, England's chairman of selectors, who joined Tony Jordan, the new member of the selection panel, at the tournament.

Many Frenchmen it is said anticipated another international session from Rivers, though he will not be going to Japan and the tour captaincy remains with Dintans. The French, however, who had come to the impression that the Barbarians' dominance of the loose ball was not to be beaten, also produced another effective player, in Bourbon, the Parc No 8, though doubtless he was grateful for the efforts of his right forwards who rolled back the Harlequins pack whenever they needed to.

It was not a good day for the host forwards. With the exceptions of Rivers and O'Brien they were outclassed and midway through the

RUGBY UNION: BRIDGEND WIN SEVENS AND FRENCH WIN FRIENDS

Harlequins receive a French lesson

By David Hands
Rugby Correspondent**HARLEQUINS**.....20**FRENCH BARBARAIS**.....42

There was no disgrace in the Harlequins' defeat by five goals and three tries to two goals and two tries at Twickenham on Saturday. The French Barbarians, paying tribute to the memory of Lord Wakefield, brought a side worthy of an international: eight of them members of the 28-strong party which will tour Japan later this month, while four more, including Rivers, the captain, were senior internationals of some standing.

With Woodhouse under pressure to set piece ball and receiving little loose ball the best was not seen though Harlequins' backs, though Thompson, swaying higher and higher, worked space when he could. But he could not smash the shimmering Avocados who played most of his 21 internationals as wing but carved through

FOOTBALL: INCREASED INCENTIVE FOR VICTORY HAS LITTLE EFFECT ON CLUBS

Almost half already in their rightful place

By Stuart Jones, Football Correspondent

It was Newcastle United's weekend. After three matches they head the first division and the man who led them there, Jack Charlton, is tall enough and honest enough to keep his feet on the ground while he touches the heights.

He admits that his team are "lacking in quality" and that if they find themselves in trouble, they "just jump it". His description covers not only Newcastle. It stretches far across the first division.

As the spread of talent grows thinner, so realistic expectations of finishing within sight of the summit become more limited. The season is far too long and far too competitive for those clinging to false hopes to hold on. But, after only four hours and a half, almost half of the 22 clubs have already found their rightful place.

In spite of the increased incentive for a win, a mere handful will rise or fall dramatically during the next 39 fixtures. Since the new rule was introduced in 1981, an average of only four clubs have either gained or lost 10 or more places between the publication of the first and the last official tables.

Old firm are poised to challenge

By Hugh Taylor

Impressive displays by Celtic and Rangers brought hope to their world supporters that a sterner challenge will at least be presented to Aberdeen, who appeared to be running away with the premier division championship.

Celtic won their first league victory by beating Morton 3-0 at Parkhead. In ruthless mood, the home team attacked from the whistle and before the luckless Greenock side realized what was happening they found themselves four goals down. McCarver, the forward who had been floundering in the early season games, regained all his old sparkle, scoring two goals and playing a big part in the others scored by McClain (two) and Grant.

Rangers revealed, at Dens Park, where they beat Dundee 3-0, that their new blend is becoming more potent in an exciting game. The former Dundee players, Ferguson and Reid, scored twice for Rangers. Aberdeen, however, maintained their 100 per cent league record and their 4-1 victory over Hibernian proved that they will not easily be dislodged from the leading position.

Well-taken goals by McKinnon, Black and McDonald did nothing to restore the fortunes of Hibs, who had moved into third place in the first half. Their manager, Pat Stanton, was ordered from the touchline by the referee after an outburst to a linesman. The Hibernian goal was scored by Jamieson.

If the agony of Hibernian, knocked out of the league cup by lowly Montrose, continued, the luck of St Mirren changed dramatically. They had a splendid 1-0 win over Dundee United at Love Street and redeemed themselves in the eyes of their supporters for their midweek defeat by Cowdenbeath in the league cup.

The goal scored by McAvan has now been controversial as United claimed off-side, but St Mirren made the visitors, who are set by many to be the country's most attractive team, look ordinary. With their second successive defeat, United's hopes of winning the title have taken a blow. A goal by Park gave Heart of Midlothian a lucky win over courageous Dunbarians at Tynecastle.

Meanwhile, the Scotland manager, Jock Stein, will today announce his party for the international with Yugoslavia at Hampden Park a week on Wednesday. Although Scotland has received permission from the FA, some of Barca's stars are unavailable. But there could be a recall for Hansen, the Liverpool defender who has been out of favour for more than a year.

Coventry's cage

Coventry City, who had hoped to erect a fence around their pitch in time for their next match following Saturday's pitch invasion by supporters during the game with Leiston City, now say it will take at least 12 weeks for the work to be completed. The club, who were the first in England to have an all-seater stadium, are now also planning to remove the seats from the Spin Kop end of their ground.

This was a match of some

A substitute who was the real thing

By Vince Wright

Ipswich Town 1
Manchester United 1

Shrewsbury substitutions often have a dramatic effect on the outcome of matches, such was the case at Portman Road on Saturday when Bobby Ferguson, the Ipswich Town manager, sent on Alan Sunderland for Kevin O'Callaghan midway through the second half.

Ipswich were a goal down and lucky not to be further behind before Sunderland's entrance transformed the game. The Ipswich smacks, previously predictable and laborious, immediately began to carry more threat and Manchester United, who were in control without being convincing, suddenly realized that they had a fight on their hands.

It was Sunderland who equalized with a flying header in the thirty-third minute after Gates and Pursey had combined well on the left and Sunderland's defense was looking somewhat weakly by the finish as Sundown (twice), Pursey and Pursey all came close to scratching a winner for Ipswich.

This was a match of some

excitement, but precious little enjoyment, Ipswich, until Sunderland's arrival, were painfully out of touch with nerves breaking down almost before they had started. United, too, have still to get their act together. Sunderland was less influential than usual while Brazil's nightmare continues.

The enigmatic Scottish forward has looked a square peg in a round hole since leaving Ipswich early last year. Addison, who was denied a place on the bench on Saturday but the sharpness and assurance which he used to display regularly at Portman Road have gone. Brazil was unable to make amends for a bad miss in the first half as an aside. Ferguson, his injury led to his withdrawal at half-time. This gave Whiteside another opportunity to stake a claim for a place and he made the most of it.

Then Addison, who was a surprise inclusion, and Olsen worked hard but their overall contribution fell short of what is expected of them. Sirachan's game was based mainly on energy but even he began to flag in the stifling heat. Olsen will be disappointed that he failed to accept at least one of two reasonable chances that came his way when Ipswich were at their best.

Grealish, making his first senior appearance for Ipswich, failed Olsen with a good finger tip save and then the Danish international misfired from point-blank range. After Whiteside had cleverly created the opening, United's goal came after 33 minutes. The Ipswich defense, in which Butcher was the unexpected hero, allowed Dunbar and Olsen to set up Hughes, who headed in decisively.

IPSWICH TOWN: M Grealish; G Butler, S McCullagh, R O'Brien, P McEvoy, K O'Callaghan (sub); A Maitland, M Lawrenson, R Whelan, A Kennedy, N Lomax, R Wilson, P Goss, J Goss, P Pursey, M Gates, P Pursey, M Pursey, M Waters, P Mitro, G Cowans, D Mortimer. Referee: T Miles (Barnet).

MOLBY: delicate touch

Referee: J. Moore (Brentford).

Referee: J. Moore

University Appointments

Technische Universität Berlin



Position available
Technical University Berlin
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ASSOCIATE PROFESSOR

(salary level C3)
Reference No.: 1-532

The Zentrum für Antisemitismusforschung seeks associate professor on the appointment. We will consider historian or social scientist grounded in the disciplines but willing to cooperate in research in the field of antisemitism, racism, anti-Semitism, group conflict, minorities, or related areas. Applicant must prove competence through previous publications and activity, and will be expected to teach and engage in research in the area of a systematic analysis of modern anti-Semitism. Applicant will be expected to create a research and teaching emphasis in line with his/her publications, especially for the history and theory of anti-Semitism in the 20th century.

Formal requirements

D.Phil. or substantial record of publications (Habilitation or its equivalent). Knowledge of German required.
 Application should be postmarked no later than four weeks after the date of this advertisement, and should be mailed with proper documentation under the above reference no. to: Präsident der Technischen Universität Berlin, HIA 13, Str. des 17. Juni 135, D-1000 Berlin 12.

UNIVERSITY OF ABERDEEN

CHAIRS IN ENGINEERING

Applicants are invited for appointment to two chairs within the Department of Engineering.

1. Jackson Chair of Engineering Science: Candidates should have expertise broadly in the field of mechanical engineering.
2. Chair of Electrical Engineering: Candidates should have a proven record of achievement in one or more of the following areas: telecommunications and signal processing, microelectronics and digital systems, industrial electronics, microtronics.

Further particulars and application forms from The Secretary, The University, Aberdeen with whom applications (2 copies) should be lodged by 31 October 1984.

London School of Economics and Political Science
 BURSAR

The school is seeking to appoint a Bursar. Following reorganization of the School's administrative structure, the Bursar will be one of three senior officers reporting to the Director of Studies and the Director for the administration of the School. The Bursar will be responsible for building projects, property management, central administrative services, Head of Services, catering, domestic services and certain other ancillary services, and will play a full part in the general administration of the school.

The appointment will be made from 1 May 1985 or a date to be arranged thereafter. Salary will be within the £12,125-£14,125 salary structure for Administrative Staff in Universities (Professional equivalent range).

Further particulars of the appointment and application form are available from the Secretary, London School of Economics and Political Science, Houghton Street, London WC2A 2AE. Closing date for applications 1 October 1984.

UNIVERSITY OF NOTTINGHAM
 LECTURESHIP IN INORGANIC/ANALYTICAL CHEMISTRY

Applications are invited for this "New Blood" lectureship from candidates with research and teaching interests in Inorganic and/or Analytical Chemistry. The appointment is primarily for some years' research in the new analytical/physical measurement area, but applications may also be welcomed from candidates with consultations in other areas of inorganic chemistry and/or analytical chemistry. It is hoped that the appointee's interests will complement those of the present inorganic staff.

The salary for the post will be within the £12,125-£14,125 per annum, with a starting date as soon as possible in 1984-85.

Further details and application forms, not later than 30 September 1984, may be obtained from the Secretary, Nottingham University, University of Nottingham, University Park, Nottingham NG7 2RD. Please quote Ref No. 9334.

UNIVERSITY OF ST ANDREWS

Secretary's Department
 Applications are invited from graduates or others with equivalent qualifications.

ADMINISTRATIVE ASSISTANT

In the Department of the Secretary the post will be mainly involved in the services of a Faculty Council and some committees. Some experience of administrative work in higher education will be an advantage. The post is appropriate for an A.G.S.C. (approx. £12,125-£14,125 per annum) and is subject to the usual conditions of service.

Further details and application forms, not later than 30 September 1984, may be obtained from the Secretary, St Andrews University, St Andrews, Fife, KY1 6 PAJ, to whom applications (two copies) should be sent. The names of three referees, should be given. Closing date 1 November 1984.

Please quote Ref. 1-532-A.

University of St Andrews

Applications are invited for the IRVINE CHAIR OR CHERISTY

which will fall vacant on the retirement of Dr. J. R. Irvine, currently Vice-Chancellor. Salary £17,275 plus a year. Particulars from the Secretary, St Andrews University, St Andrews, Fife, KY1 6 PAJ, to whom applications (two copies) should be sent. The names of three referees, should be given. Closing date 1 November 1984.

Please quote Ref. 1-532-A.

University of Bristol

CHAIR OF CHILD HEALTH

The University proposes to make an appointment to the Chair in Child Health following the retirement of Professor N. R. Butler in July 1985.

Suitable candidates are invited to submit applications for 20th September 1984. Further details and application forms may be obtained from the Registrar and Secretary, University Senate House, Bristol BS8 1TQ.

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Minimum qualifications MA degree

Interested parties should write to the address below for further details attaching CV

The Libyan People's Bureau Dar Tarek, Tower Road, Sliema, Po Box 19, Malta

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SCHOOL OF HUMANITIES

RESEARCH FELLOWSHIP

Applications are invited for a Research Fellowship tenable in the following Disciplines and areas of study: Literature in English (including new literatures in English); English Language and Linguistics; American, Portuguese, Brazilian, Latvian, Romanian languages and literatures; Comparative Drama (Theatre, Film, Performance); Poetry; Prose; Graduate Creative Writing; Cultural Studies; Sociology; Social Anthropology; Women's Studies; Visual Arts; Art History.

Applicants should be younger researchers who have recently completed a PhD degree prior to taking up appointment or should have completed equivalent research experience. Academic holding tenured (environmental) appointments at Flinders University of South Australia for 10 years or more would be desirable but not essential.

The appointment will be made within the salary range £21,411 to £24,526. An excursion / economy class air fare to Adelaidia for the appointed only and up to £411.00 towards removal expenses will be provided.

Applications, including detailed curriculum vitae and academic record, list of publications and names of at least two referees, should be lodged in, with the Registrar, The Flinders University of South Australia, Bedford Park, South Australia 5042, by 20 September 1984. Applications should be forwarded to the Registrar before the closing date.

UNIVERSITY OF WARWICK

LECTURESHIP IN PSYCHOLOGY

Applications are invited for a Lectureship in Psychology additional to the vacancy advertised in June.

Candidates should possess and honours degree in Psychology and relevant experience in the Cognitive Science area. The successful candidate will be appointed to the MSc in Cognitive Psychology and Psychology. Contributions to the under-graduate teaching in Psychology and Psychology Honours, languages and cognition would be welcome. Research interests in artificial intelligence, cognitive psychology and the application of Psychology in computing would be an advantage.

Candidates with interests in developmental psychology and/or language should also apply to myself but not later than 15 October 1984.

Salary will be on the lecturer scale £7,190 - £14,125 (under review) but one of the two vacancies must be filled at not more than the 4th scale point of £12,500.

Informal enquiries to Professor J. Auzure, Tel. 020-8240111, Ext. 2105. Applications forms and further details from The Registrar, University of Warwick, Coventry CV4 7AL quoting reference 1/24/84/3 by 6 October 1984.

Closing date 21 September 1984.

The University of Leeds

DEPARTMENT OF MECHANICAL ENGINEERING

LECTURER

Applications are invited for the post available from a state to be arranged with the successful candidate.

The post is in the field of solid mechanics with particular reference to stress analysis, engineering applications of finite element analysis. Familiarity with appropriate computing techniques and an interest in developing laboratory and computing facilities for research and teaching would be an advantage.

Applicants should have a good honours degree with evidence of original research. Familiarity with computers and ability to communicate with engineers or computer specialists will be an advantage.

Further inquiries may be made to Professor R. N. Cole (Tel. 01223 347181, Ext. 2525). Salary scale for 1984-85 £13,615-£16,265 per annum according to age, qualifications and experience.

Further particulars may be obtained from the Administrative Office, Tel. 01223 347181, Ext. 2525. Closing date for application 10 October 1984.

Salary will be either IA or IB scales, ranging from £6,310 to £9,425 per annum, plus £1,000 per annum for research, according to age, qualifications and experience.

Application forms and further details from the Registrar, The University, Leeds LS2 9JT (Tel. 01223 451761 (Ext. 7700), 451762 (Ext. 7701), 451763 (Ext. 7702)). Closing date not later than 5th October 1984.

Salary will be either IA or IB scales, ranging from £6,310 to £9,425 per annum, plus £1,000 per annum for research, according to age, qualifications and experience.

Application forms and further details from the Registrar, The University, Leeds LS2 9JT (Tel. 01223 451761 (Ext. 7700), 451762 (Ext. 7701), 451763 (Ext. 7702)). Closing date not later than 5th October 1984.

Further particulars may be obtained from the Administrative Officer, Tel. 01223 347181, Ext. 2525. Applications forms and further details from the Registrar, The University, Leeds LS2 9JT (Tel. 01223 347181, Ext. 2525). Closing date 20 September 1984.

KENNEDY SCHOLARSHIPS
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Up to twelve Kennedy Scholarships will be awarded annually in the academic year 1985-86 at Harvard University and the Massachusetts Institute of Technology. These scholarships are available to United Kingdom students who have demonstrated a strong interest in research. Duties will include a placement at the University of Polytechnic of Milan for a period of one year, which will be followed by a placement at the Massachusetts Institute of Technology for a further year.

Further information about the position and the details required of applicants may be obtained from the Secretary, Kennedy School of Government, Harvard University, Cambridge, Mass. 02138, USA.

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HORIZONS

The Times guide to career choice

Why architects, not zoologists?

If you're due to start a course of higher education in a few weeks time what sort of person will you be when you emerge from college in three or four years?

For some students the aims are specifically orientated: a professional qualification or a career-related degree. For others the purpose may be more nebulous and expressed in terms of personal development and increased maturity.

What few people say is that they want to be "better educated". Although higher education is as popular as ever, the status of universities has gone down as cynicism has grown about academics and the value of education for its own sake. It is not surprising, therefore, that students regard higher education as a way into a job or a kind of glorified finishing school. Simply being "better educated" doesn't count for much these days.

"I've become much more self critical but also more self reliant," says Kate Caulder, a Fine Arts graduate who assesses her own growth in terms of imagination and creativity.

"I've gained much wider horizons and feel I'm a more capable person now," says Suzanne Owen, who has been studying literature and has had the chance to go on an exchange visit to America as part of her course.

Suzanne and Kate, in common with tens of thousands of other students, each come up with their own version of why higher education has been good for them. Very few among those thousands would admit it had been a waste of three years: indeed there's always a warm glow about what a great time they had.

Nonetheless it's clear that, for some people, doubts creep in. "I sometimes wonder whether I was getting anywhere or, indeed, where it was all leading," said Suzanne, clearly unconvinced of the intrinsic value of her studies.

Meanwhile fellow student, Nick, expressed concern about the mismatch in expectations between students and their parents.

"It's still assumed that if you're a graduate then he world's your oyster," complained Nick, "but of course that's not the case anymore and students are becoming increasingly aware of the urgent need to get a job afterwards."

It is, no doubt, the anxiety about what awaits them in the outside world

Edward Fennell concludes his series on higher education

which breeds a kind of impatience with academic values. What students want is a survival kit of skills and qualities which will see them through the testing time ahead.

The possibility of unemployment now features as a gloomy spectre at the end of the degree or diploma course. Self-help groups for unemployed graduates have become an established social institution. Many students on non-vocational courses see themselves as building up the necessary resources and strengths to endure an extended period on supplementary benefit and exchange depressing "straw poll" statistics to demonstrate that nobody they know has even had an offer of a job.

Meanwhile among other student groups, the reverse is the case: electronic engineers in particular will swap figures on how many companies are bidding for their services and will take some pleasure in turning down perhaps five or six suitors before saying yes to one lucky applicant.

The result of all this is that the student body is becoming distinctly fragmented. The figures produced in the Department of Education and Science and Department of Employment report *Graduates and Jobs* (although controversial in some ways) highlighted the differences.

For example, 55 per cent of male geography graduates ended up unemployed compared with just 5 per cent of architects. Forty per cent of women zoologists were left without jobs compared with full employment for pharmacists; and when you remember that those two groups of girls probably shared the same laboratories for A Level study it is a sharp reminder of how important degree subject choice can be.

If you've already opted for something which is non-ideal (such as a general arts subject at an institution no employer has ever visited) then pay even more attention to the remaining nine points!

● Be career-minded throughout your course. It's no good waking up to the "race for jobs" in your final year - by that stage more than two thirds of your opportunities will have gone.

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THE TIMES MONDAY SEPTEMBER 3 1984

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For details write to: Major John Floyd, Army Officer Entry Dept. S2, Empress State Building, Lillie Road, London SW6 1TR.

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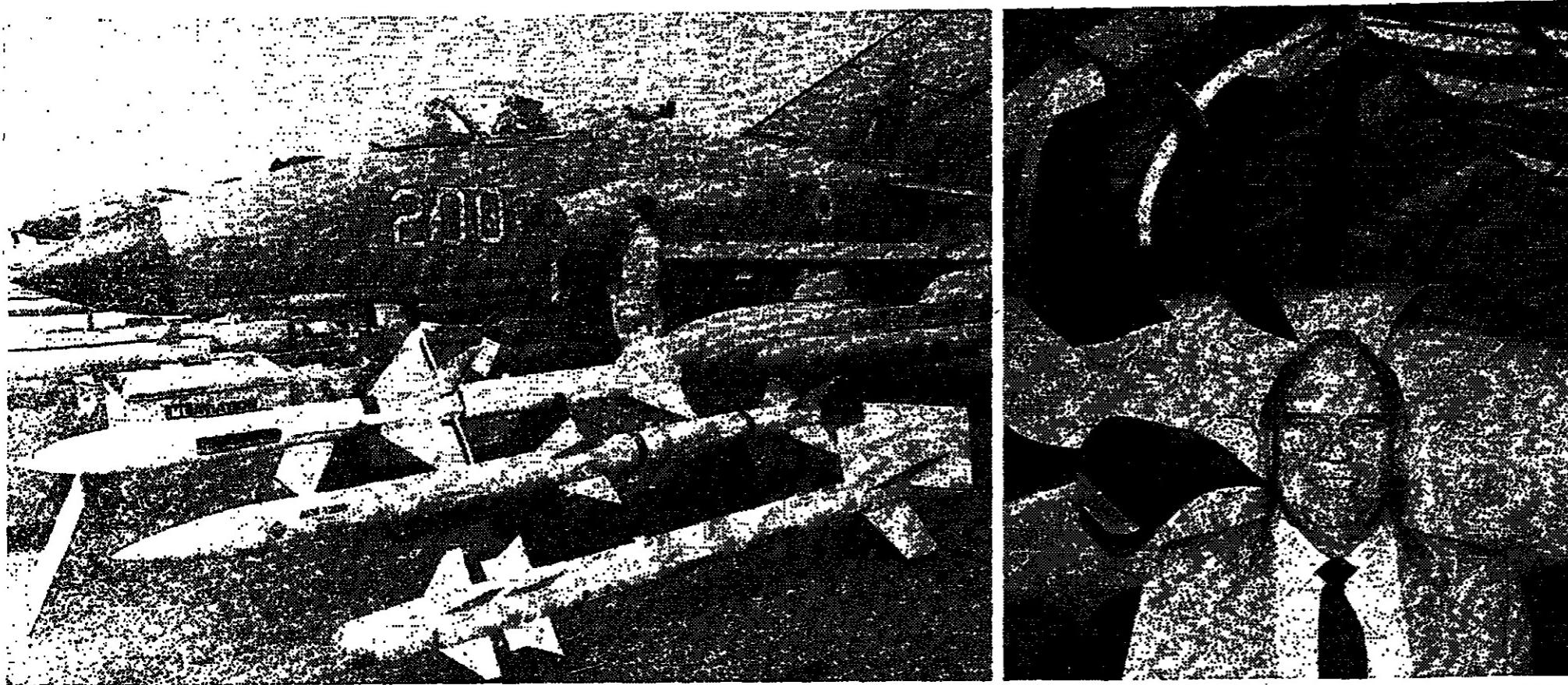
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The British Aerospace Hawk 200 fighter (left), and Mr Brian Rowe of General Electric, with the company's unducted fan engine. (Photographs: Suresh Karadia and Murray Job).

British jet fighter takes a bow at Farnborough show

By Rodney Cowton and Edward Townsend

British Aerospace yesterday announced plans to adapt its Hawk two-seater jet trainer aircraft into a single seat fighter which it hopes to sell to developing nations as well as existing customers.

British Aerospace used the opening of the Farnborough Air Show to unveil the Hawk 200 which it is hoped to sell at about £7m per aircraft to countries which already use the Trainer version of the Hawk, such as Indonesia, the United Arab Emirates, Finland, and Zimbabwe. The company also hopes to interest developing nations which want a fighter capability at lower cost than many of existing front-line fighters.

The Hawk 200 will be powered by an improved version of the Adour engine produced by Rolls-Royce and Turbomeca.

Two industrial partnerships to compete for different Royal Air Force contracts were announced at the air show.

The firecracker company, whose British-designed basic trainer, is competing with three foreign design aircraft for a £200m contract to supply the RAF with a replacement for the Jet Provost basic trainer, announced that it is to form a

joint company with Hunting Associated Industries and Guiness Mahon, the merchant bankers.

Meanwhile, Short Brothers and the American company, Sikorsky announced that they are to collaborate to compete for a contract to supply the RAF with 75-125 medium weight Blackhawk helicopters to replace the existing Wessex and Puma. Sikorsky also announced that it proposed to use an engine produced by Airbus Industrie, the European consortium, which Britain has a 20 per cent stake, and which is likely to be powered by the new IAE V2500.

Northern Ireland stands to receive a £200m boost if the link-up is successful.

Competition will come from the new Lynx 3, produced by Westland, and a new Puma helicopter.

Twenty-five years after the jet engine took over from propellers on big passenger aircraft, General Electric of the United States yesterday unveiled its plans at the air show to develop new high technology prop-fan engines for the 1990s.

The new engine, called an unducted fan engine, is being funded by GE and the National Aeronautics and Space Administration. Boeing and McDonnell Douglas of the US, are both said to be interested in testing the engine on their 727 and DC9 aircraft.

Chapple says his men will work normally

Continued from page 1

condemn picket line violence. "The failure in the statement by Len Murray to condemn violence is an outrage. He says the trade union movement would never condone violence, but he does not say that he condemns it."

Mr Chapple said: "It was a similar situation which led him into difficulties during the 'Winter of Discontent' — a reference to attacks on the movement's refusal to criticize the public services workers over 'failure to bury the dead complaints'.

"Our members will be told to carry on with their normal duties," said Mr Chapple. "The miners do not deserve the support of other unions, particularly not the power workers."

He challenged Mr Scargill's claim that miners today were fighting to save the future jobs of their sons. "What sort of nonsense is that?" demanded Mr Chapple. "The only way to protect the jobs of workers' sons is to make sure that we make Britain efficient in the production of energy."

"What the trade union movement ought to be doing is testing to see if the miners' ballot is to be done in a responsible manner. That is what the TUC is doing. It is a responsible ballot — a ballot of conduct — which goes to the core of some of the issues to be debated at the TUC."

He says the oath might include total repudiation of violence in industrial disputes, a pledge not to strike before agreements expire, a commitment to use strike action only as a last resort; a pledge not to initiate strikes which can only ruin the lives of others, usually innocent bystanders, without first totally exhausting all other channels, and holding a secret ballot; a pledge to take no industrial action that might cause death or physical injury, and a disavowal of strikes for political purposes, and a commitment to seek to change the law through the ballot box.

Key unions threaten TUC pact

Continued from page 1

Mr Arthur Scargill, president of the NUM, confirmed to *The Times* yesterday that there are continuing efforts behind the scenes to get miners' leaders and on picket lines, will be presented by general secretary Eric Hamzard.

It is a standpoint certain to cause angry scenes among delegates committed to the principle that one union does not cross another union's picket line.

Mr Chapple, in his book *Sparks Fly*, published by Michael Joseph (£9.95), suggests a trade unionists' Hippocratic oath — code of conduct — which goes to the core of some of the issues to be debated at the TUC.

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include total repudiation of violence in industrial disputes, a pledge not to strike before agreements expire, a commitment to use strike action only as a last resort; a pledge not to initiate strikes which can only ruin the lives of others, usually innocent bystanders, without first totally exhausting all other channels, and holding a secret ballot; a pledge to take no industrial action that might cause death or physical injury, and a disavowal of strikes for political purposes, and a commitment to seek to change the law through the ballot box.

Letter from Warsaw

Lonely hearts seek foreign passport

At its most primitive, the mating game in Poland is played in Warsaw cafés like the Szampanska. The men, brandishing gold rings and gold teeth like medals, stroke their stomachs, drink coffee and Coca-Cola, toy with beads and talk in the fast, throaty chock of demotic Arabic.

Occasionally they will fall silent and stare across the room at the gaggle of women in a corner, giggling in conspiracy.

They may stop at an intermediary stage, and there will probably be talk of love en route. But the final destination is not in doubt: the women are looking for handsome husbands with foreign passports as an escape from the greyness of provincial Poland, the men for solace in a strange country.

Flights from Beirut, Damascus and other points east are invariably met by brides on, in the rather vague Polish usage, fiancées. University students of Arabic earn pocket money by writing long, sad letters on behalf of Polish wives waiting for word from their men.

The demand for Polish wives is not confined to the Middle East. Americans of Polish descent still arrive looking for partners from the home country, thinking women will somehow conform to the model of Catholic, Slavic home-making virtues that eludes them in Chicago.

The demand for Polish wives is not confined to the Middle East. Americans of Polish descent still arrive looking for partners from the home country, thinking women will somehow conform to the model of Catholic, Slavic home-making virtues that eludes them in Chicago.

Marriage bureau in every big town

It is said that American entrepreneurs have also been planning to bring busloads of Polish-American spinsters to Poland on trawling missions.

For those who prefer a less direct approach, there are the marriage bureaux which now function in every major Polish town offering, in the words of one advertisement, to "help you discover the late spring of your life".

There are of course no computer dating systems (possibly they fall under the Western ban on strategic technology).

For about £10, the client visits a discreet office and flicks through an album of photographs. Here the search for love has a slight edge on the search for a foreign passport. Young or not so young bachelors look for wives who can turn their hand to milking, divorcees try to patch up their lives, single mothers seek a way out of a

Roger Boyes

The newspaper *Weto* cited the case of Gerard S., a man in late middle age who had obtained the identity card of an army colonel and that of a doctor. "It's hard to imagine any single woman in her late 30s who would reject a colonel or a doctor", the paper said. Disturbingly, he used the nickname Roger. Many women were enchanted with the latter name... At the sound of the name Roger they happily revealed their souls and their bodies to the cheat.

Roger, of course, stole their jewels and hard currency, savings and moved on. He was caught when he started to steal car batteries from his lovers' cars, fill them with sand and sell them as new on the black market.

Roger Boyes

THE TIMES INFORMATION SERVICE

Today's events

New exhibitions
Paintings by Rob Fairley and Ceramics by Paul Gandy. Open Eye Gallery, Cumberland Street, Edinburgh: Mon to Fri 10 to 6, Sat 10 to 4; (until Sept 13).
The Whisky Roads of Scotland: photographs by Paul Godwin. Crawford Centre for the Arts, St Andrews University, Mon to Sat 10 to 5, Sun 2 to 5; (until Sept 16).
Horses on Wheels: paintings by Martin Rayner. Arts Centre, Lyric Theatre, Belfast: Mon to Sat 10 to 5, Thurs 10 to 6; (until Sept 6).
Photographs by C. W. Taylor. Rozelle House, Rozelle Park, Ayr: Mon to Sat 11 to 5, Sun 2 to 5; (until Sept 30).
New York Graffiti: photographs by Tom Bromley. ArtSpace Galleries, 100 New Bond Street, London: Mon to Sat 10 to 5; Sun 2 to 5; (until Sept 27).

ries, Castle Street, Aberdeen: Mon to Sat 10 to 5.30; (until Sept 12).

Poils by Muriel Macintyre, and print by Gladys McAvoy. Museum and Art Gallery, Castle Wynd, Inverness: Mon to Sat 9 to 5; (until Sept 29).

Ceramics, jewellery, stained glass, and mezzotints. Oxford Gallery, High Street, Oxford: Mon to Sat 10 to 5; (from today until Oct 3).

Horses on Wheels: paintings by Martin Rayner. Arts Centre, Lyric Theatre, Belfast: Mon to Sat 10 to 5, Thurs 10 to 6; (until Sept 6).
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Nature notes

Sedge and reed warblers have left the lakesides and ditches; tree pipits have left the woodland edges. Willow warblers, which were very widespread in Britain this year, are moving south on a broad front. All these species are en route for tropical Africa, and thousands are crossing the English Channel every day. Chiffchaffs are also leaving, but most of them will go no further. The Mediterranean warbler, however, will be among the first spring migrants to return next year, at the end of March.

On many lime-trees, a whole branch is turning yellow, while the rest of the tree remains quite green; on the hornbeams, individual leaves are changing colour all over the tree, giving it a dappled look. Some birches have turned completely. Among the dead purple stalks of cow parsley, the autumnal reddish, upright hedge parsey, is flourishing with great vigour, and will flower. Badgers are busy extending their underground 'sets' before the cold weather comes. Wasps are feeding on fallen fruit and jammy knives: for the larvae in their nests they take back meatier food, and can be seen biting off the wings and legs of a daddy-long-legs, or crane fly, before flying away with the body.

The papers

Back-to-school day tomorrow means back to chaos says The Sun, referring to the likely effects of the TUC's reimposed work to rule.

According to the Daily Mirror, falling rates of pay in Britain's comprehensive means that at least one million pupils returning to school tomorrow will not get the good education they are entitled to expect.

"Truancy, vandalism, sloppy teaching and under-achievement are common."

The Sunday Times said the Trades Union Congress is "likely to ring with the rhetoric of the steam train" as it begins its meeting.

According to The Sunday Telegraph, it will be "an unpleasant spectacle, all bitterness and mayhem," spotlighting the "near-chaos" into which the trade union movement has fallen".

Scotland: M9: Contraband between junctions 4 (Polmont) to 6 (Falkirk). Roadworks to A9, A90 and A92, Glasgow, closed westbound diversions. A74: Lane closures between B740 and Abington, Lanarkshire.

Midlands and East Anglia: A1: Contraband and diversions between Wimborne and Caddington, Northants to A45, Corby to A43, on Coleshill by-pass, Warwickshire.

A1: Various lane closures between Mickleton and Wetherby, W Yorks.

North: A6: Single lane traffic on London Road, Hazel Grove, Greater Manchester. A69: Bridge over Chainsey Burn, Bardon Mill, Northumberland, closed; diversions.

West and South: A38: Lane closures between Exeter and Plymouth at Marsh Mills Viaduct, Devon. A55: Contraband on Llandudno by-pass between Chester and Colwyn Bay.

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Anniversaries
Deaths Sir Edward Coke, jurist, Stoke Poges, Buckinghamshire 1634; Oliver Cromwell, Lord Protector 1658-59, London, 1658; Edward Beneš, president of Czechoslovakia 1935-48, Sezimov Ustí, 1948; e. e. cummings, poet, North Conway, New Hampshire 1962; He Chi Min, president of North Vietnam 1945-59, Hanoi, 1969.

National Day
Qatar, on the west coast of the Arabian Gulf, celebrates its National Day today. A country of some 4,000 square miles and about 260,000 people, mostly concentrated around the capital, Doha, Qatar became an independent sovereign state in September 1971.

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Bond winners
Winning numbers in the weekly Premium Bond draw for £100,000: 16RW 018793; 21ZK 856044 (Channel Islands); £53,000: 30AZ 766577 (Cornwall).

Postal charges
The freeze on postal charges ends today. The price of a small second class stamp goes up from 16p to 17p, and first class from 16p to 17p. Charges for overseas mail and inland parcels are also increased.

The Solution of Saturday's Prize Puzzle No. 16,524 will appear next Saturday

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1 Ex-pupil with degree returns to pulpit (4).
2 Unfashionable purpose, to produce wine (4).

3 Concise Crossword PAGE 8

The pound

Bank
Australia \$ 1.60
Brazil 27.80
Belgium Fr 80.00
Canada \$ 1.75
Denmark Kr 14.30
Finland Mark 8.25
France Fr 11.95
Germany DM 1.51
Hong Kong \$ 10.65
Ireland Pd 1.27
Italy L 241.00
Japan Yen 320.00
Netherlands Gld 4.41
Norway Kr 11.22
Portugal Esc 222.00
South Africa Rand 2.24
Spain Pts 221.00
Sweden Kr 11.25
Switzerland Fr 3.27
USA \$ 245.00
Venezuela Dr 245.00

NOON TODAY Pressure is shown in millibars. FRONTS: Warm, Cold, Occluded. By: Metrevo

Weather

Troughs of low pressure over Scotland and Northern Ireland will move S into northern parts of England during the day.

6 am to midnight

London, SE, central S, E, central N England, East Anglia, Midlands, Channel Islands: Sunny periods developing, a few showers, wind SW, moderate, max temp 23 to 25°C to 73 to 77°C.

SW England, Wales: Mostly dry, sunny intervals, coastal fog patches; wind SW, moderate; max temp 20 to 22°C (88 to 72°F).

NE England, Lake District, Isle of Man, Borders: Edinburgh, Dundee, Dundee, Glasgow, Northern Ireland: Cloudy, occasional rain, wind SW, light, max temp 15 to 17°C (59 to 63°F).

Scotland: Fife, Angus, Perthshire, Highlands: Rather cloudy, bright spells, occasional showers; wind NE, light, max temp 10 to 12°C (50 to 54°F).

Outlook for tomorrow and Wednesday: Mainly dry and bright, with more showers; warm at first in SE, but becoming near normal in all districts.

SEA PASSAGES: S North Sea, Strait of Dover: Wind SW moderate or fresh, later locally strong seas moderate, locally moderate winds, sea moderate or fresh; wind SW moderate or fresh, becoming variable, light sea moderate, later slight.

NOON TODAY Pressure is shown in millibars. FRONTS: Warm, Cold, Oc

BAe to spend £100m on 'stretched' jetliner for commuter routes

By Edward Townsend

British Aerospace yesterday announced a £100m larger version of its successful three-nation 146 regional jetliner - claimed by the company to be the world's quietest jet - which could create several hundred jobs.

The company said at the Farnborough Air Show that it would launch a "stretched" version of the 146, each costing about £14m, in 1988. The aircraft, 18ft longer than the first 80-seat 146 which flew in

1981, will carry up to 130 passengers.

British Airways could be using the jet on some of its low-density European routes. The new 146 puts Britain back in the ranks of the world's airliner manufacturers.

Mr John Glasscock, director of the BAe civil division, said the company had been under pressure from airlines to develop the 146 to cope with larger payloads in the world's commuter routes, particularly

The 146 components provided by two risk-sharing partners - Avco Aerostructures of Tennessee in the US, which makes the wings, and Saab-Scania in Sweden, which produces the tailplane and all control surfaces. The engine pods are built by Shorts in Belfast.

The plane is powered by Avco Lycoming engines and is known by BAe as "the whispering jet".

The new 146 will be complemented by a freighter version. Like its two previous versions, said BAe, the new aircraft will operate at flight cost levels "well below those of most other jet transports now in widespread regional and trunk services".

The aircraft's increased capacity is expected to reduce operating costs per seat-mile to well below those of twin jets of comparable size and would approach levels achieved by many of the new 140-150 seat aircraft, according to the company.

Since its launch, the 146 has cost £400m in development and sales have reached 38 firm orders and 43 options from seven airlines and the Royal Air Force.

Boeing to develop US heavy-lift helicopter

Boeing has been given \$70m (£33.8m) by the US Government to build what will be the largest heavy-lift helicopter in the world.

The aircraft, shelved by the Nixon administration, and now approved by President Ronald Reagan, will be able to carry 35 tonnes. This covers every piece of equipment in use by the US Army except its main battle tank.

Boeing's announcement has overshadowed the arrival at the Farnborough Air Show of the Russian Mi-26 at present the world's largest helicopter with a payload capacity of 26 tonnes.

The Mi-26, Ilyushin wide-bodied airliner and Antonov twin-jet aircraft represent the first air show exhibit in Britain by the Russians, who are keen to negotiate technology

By Colin Hughes

Teachers, who started the new term yesterday by taking sanctions in schools, will hear the result of their pay arbitration by the end of this week.

The action, which forced some schools to send children home early on the first day back after the summer break, is in protest at alleged delays in setting up arbitration to settle the pay dispute.

Employers have called the action pointless, because it cannot speed the arbitration decision, but leaders of the 235,000-member National Union of Teachers, which is operating the sanctions, clearly hope to maintain last term's mood of militancy up to the end of this year's pay round.

Although the independent chairman of the arbitration panel, Professor Eric Armstrong, declined to set a date for the decision, union leaders have been told it will be within two or three days.

Tender touch for backs

Injectors of a substance similar to meat tenderizer used in cooking could avert the need for surgery for many back pain sufferers.

The new treatment, approved recently by the Committee on the Safety of Medicines, could help to reduce the 31 million working days lost as a result of back trouble.

By John Young, Agriculture Correspondent

perfect seedbed for the new crop.

But public opposition to the pollution and danger has led to restrictions on burning, and the urgency with which the ministry is examining alternatives suggests that a complete ban is not far off.

Dr Bryan Davies, regional soil scientist of the ministry's Agricultural Development and Advisory Service made it clear yesterday that a return to ploughing would involve extra costs in fuel, machinery and labour. The need was to show farmers how to keep costs to a minimum and ensure that yields did not suffer unduly.

On light soils, the difficulties were fewer than on the heavy clays of East Anglia, where chopping and ploughing-in

Setback to reforms for mentally ill

By Nicholas Timmins
Social Services Correspondent

The Government has had largely to abandon, at least for the time being, plans to provide greater safeguards for the mentally ill which were due to come into effect next month.

The arbitration decision will be sent to Sir Keith Joseph, Secretary of State for Education and Science, who has confirmed that he will publish it immediately. He must decide whether the Government will find any extra funds for employers if the award is higher than 4.5 per cent. If he wants it overturned he must take the issue to Parliament, an unprecedented step which would be certain to provoke instant strike action by teachers.

Sir Keith has said throughout that there is no more money available, and if the arbitrators award more than 4.5 per cent he will probably insist on local education authority employees finding spare cash by economizing elsewhere.

The aim was to ensure that other options to compulsory detention in hospital were considered by social workers with specialist expertise in mental health work.

The examination has been boycotted, however, by social workers belonging to the National Officers and Local Government Officers Association.

The boycott has meant that only 1,000 social workers will have passed the examination, against the 3,000 or more that local authorities believe they need to operate the new system.

Yesterday the Department of Health and Social Security announced that to meet the crisis local authorities will be able to approve many existing social workers to sign detention orders, if they have received the training before the examination.

some three tonnes of straw an acre presented a formidable challenge.

"I have no doubt in my mind that ploughing is a retrograde step," he said. "But, if it is forced upon us, we have to do it as well as possible."

Trials so far seemed to disprove the idea, prevalent in West Germany, that large applications of nitrogen in early winter were essential. That would not only save money but would please conservationists concerned about high levels of nitrates leaching into streams and rivers.

Officials yesterday seemed to agree that there had been far fewer complaints about straw-burning this summer than in previous years.

Straw-burners wooed back to the plough

By John Young, Agriculture Correspondent

A rebel miner who has defied up to 1,500 pickets won a court injunction against the Durham area of the National Union of Mineworkers yesterday.

In a rare action at Manchester High Court, Mr Paul Wilkinson, aged 28, was granted an injunction by Mr Justice Glidewell. The injunction ordered the Durham NUM not to deny Mr Wilkinson any of the rights or privileges of membership of the union. The executive committee was also restrained from taking any disciplinary action against him arising from his actions.

The NUM was also ordered not to intimidate Mr Wilkinson or use threats or force. It was told to carry out peaceful picketing only and not beset Mr Wilkinson's place of work or his home.

Mineworkers officials in South Wales yesterday prevented their own men from providing a safety cover at seven pits because some of them refused to pay a £3 levy to the food funds out of their daily £15 shift payment.

A research document released by Plaid Cymru claimed that if the National Coal Board

were to have its way completely and keep open only profitable mines then only two of the 28 pits in the coalfield would survive.



Mrs Thatcher welcoming Dr Fitzgerald on the steps of 10 Downing Street

FitzGerald in EEC talks

By Henry Stanhope, Diplomatic Correspondent

Dr Garret FitzGerald, the Irish Prime Minister, spent three and a half hours trying to unscramble the EEC budgetary mess with Mrs Margaret Thatcher at Downing Street yesterday.

But there was no hint of progress at the end, more than two months after the Fontainebleau summit at which heads of government thought they had cracked to problem.

The Irish Prime Minister whose country hold the presidency of the EEC Council, is holding a number of meetings with the other Community leaders to discuss EEC issues.

Britain is still quarrelling with her partners over when was actually agreed at Fontainebleau, with Mrs Thatcher insisting on the primary need to save more and spend less.

Meanwhile the European Parliament has once more blocked payment of Britain's £472m rebate for 1983 until this year's cash crisis has been sorted out. Britain is hoping that the EEC Budget Council will put pressure on the New York police band which took part in a march with IRA sympathizers at the weekend.

The pipe and drums band of the Emerald Society attached to the New York Police Department led a march in Bundoran, 10 miles from where Lord Mountbatten of Burma was murdered by the IRA five years ago.

The two leaders agreed to hold another of their regular meetings on the Irish problem later this year.

The Irish band ignored pleas from the Dublin government and Irish police not to take part, even after it was pointed out that 11 policemen in the republic had lost their lives in recent years to terrorist attacks.

The miners' strike

Muted response to Scargill picket call

By Glen Allan

The National Coal Board claimed last night that only one out every 14 striking miners turned out in response to a call by Mr Arthur Scargill, leader of the National Union of Mineworkers, for a fresh impetus on picketing.

A trickle back to work by miners in Yorkshire, Scotland and Kent was accompanied by a muted response from pickets.

The back-to-work trend was most marked in Kent, where the National Coal Board claimed that 26 men faced "considerable violence" from about 200 pickets when they reported for work at Tilmanstone colliery, near Dover. A further four men clocked on at Bettleshanger. Previously there had been no miners working in Kent.

In Scotland the number of miners at work passed 200 for the first time. Out of the 205 the NCB said had clocked on, 145 were at Bilsdon Glen.

Privately, NCB industrial relations chiefs were surprised that the reaction to Mr Scargill's call was not greater. In a

confidential internal memo to Mr Ian McGregor, the chairman, they expressed satisfaction that the union could "muster less than 10,000 pickets out of a total number of 140,000 striking miners".

The NCB has never before put together an analysis on an area-by-area basis of the NUM's picketing power, but as the shift arrived yesterday, they began the picket count.

According to the board's area-by-area estimate, the number of miners who turned out for picket duty yesterday fell down to 11. The shift arrived yesterday, they began the picket count.

Scotland: 470 pickets on duty.

North-East: 230. North Yorks: 800.

Doncaster: 600. Barnsley: 1200.

South Yorks: 760. North Derbyshire: 550. Northamptonshire: 100.

South Notts: 45. South Midlands: 100. Kent: 290. Western: 380. South Wales: 1,000. Coal products division: 250. Open cast mining: no significant picketing.

In addition, the board estimates that 2,000 genuine pickets turned up at Brighton, giving a total of 9,875.

Both sides disguise failure in Yorkshire

By Peter Daveyport

But the real surprise for both sides in the miners' strike faced failure in the number of pickets at pits yesterday.

Mr Arthur Scargill's call for a mass picket at every pit, coking plant and workshop failed to materialize and the NCB's hope that the trickle back to work in the NUM president's heartland might become a flood was also disappointed.

It left both sides trying to disguise the extent of their disappointment by mocking the achievements of the other.

Yesterday had been seen as the dawn of a "concentrated and coordinated movement back to work by miners opposed to Mr Scargill. It was with this in mind that the mass picket of collieries and other installations was ordered.

However, in Yorkshire, only

33 NUM men mustered for work at a dozen locations and,

although it was the highest total of the dispute, NCB officials admitted they had hoped for a bigger increase. The figures were only five up on last week.

The biggest turn-out were at

Yorkshire Main, near Doncaster, where 400 tried to prevent four men going to work; 250 at Kiveton Park, Sheffield, where seven miners clocked on and police found two suspect petrol bombs in a field after fire broke out near an electricity substation; and 200 at Marchant Main Colliery, near Doncaster where two miners went to work.

Mr Ian Ferguson, the branch secretary at the Yorkshire Main colliery and a member of the Yorkshire Executive, claimed it had been a deliberate decision of the strike committee to go against Mr Scargill's plans: "We didn't agree with his tactics. We didn't think it was necessary."

Timetable of events

March 5: York NUM calls strike over closure of Cortonwood and Bullock Wood collieries; 12: Half country's pits close as strike starts.

April 12: NUM Executive rejects call for national ballot;

19: NUM special conference calls for all-out miners' strike;

25: Mr Scargill rejects Mr MacGregor's offer to phase closure programme.

May 21: Informal talks between NCB and NUM collapse after 12 hours; 26: NUM rejects NCB peace plan on pit closure.

June 8: Mass rally by strikers

in London; 13: Third round of peace talks break down; 21:

Mr MacGregor sends letters to 178,000 miners stating he will

Mont Louis loss spurs calls for cargo rules

By Tony Samstag

The sinking of the French freighter Mont Louis off the Belgian coast nine days ago could become "another Torrey Canyon", according to scientists and lawyers.

As the Torrey Canyon, which went aground in the Channel in 1967 carrying 118,000 tons of crude oil, alerted the public to dangers of oil pollution at sea, so the loss of the Mont Louis's radioactive cargo "could have a similar impact as regards the dangers of other hazardous substances", Dr Viktor Sebek, secretary of the Advisory Commission on Pollution of the Sea (Acops), said yesterday.

Acops, an international watchdog body representing shipping and environmental interests, has called for regulations requiring "the notification of movements of ships carrying nuclear materials and other toxic cargoes". An early notice system, which Acops compared with the old yellow flags signifying a case of yellow fever on board, would also make salvage operations less hazardous.

Dr Richard Sandbrook of the International Institute for Environment and Development, said: "Sadly, the world only puts right environmental risks when there is a disaster. Hopefully in this case, while no great damage seems to be likely, the international community will respond by tightening up procedures all round."

The UN International Maritime Organization instigated controls of sea traffic in hazardous substances based on the International Convention for the Safety of Life at Sea (Solas) and the International Maritime Dangerous Goods Code.

Both codes deal with the construction of ships and containers, navigational practices and definitions of hazardous substances, including lightly radioactive wastes of the sort carried by the Mont Louis. The various IMO guidelines on reporting-in systems for ships carrying dangerous cargo are voluntary.

Dossier on shot men questioned by coroner

By Richard Ford

Police files on the death of two unarmed terrorists they shot shared differences in statements made immediately after the killing and evidence given during a murder trial earlier this year, a deputy coroner alleged yesterday.

Mr James Rodgers, deputy coroner for Armagh and Craigavon, announced that inquiries on two Irish National Liberation Army terrorists shot by the Royal Ulster Constabulary would be postponed to allow further inquiries to be made.

Mr Rodgers, a solicitor, made his allegation concerning the files 11 days after the coroner, Mr Gerry Curran, resigned, saying he had discovered "grave irregularities" recorded in them and as a result was not prepared to preside at the inquest on Seamus Grew and Roderick Carroll, shot dead in Armagh city in December 1982.

The coroner for Fermanagh and Omagh, Mr Rainey Hanna, is to hear the case. Because the deputy chief constable of Greater Manchester is conducting an inquiry into allegations of a police cover-up Mr Hanna has decided against going ahead with the inquest which was planned for later this month.

Troops leave for big exercise

About 270 men with 70 vehicles and 60 trailers yesterday sailed from Dover to Zeebrugge in Belgium as the first sizable contingent out of 56,000 troops who will cross to the Continent in the next two weeks to take part in Exercise Lionheart.

This is Britain's largest peacetime exercise designed to practise the reinforcement of the British Army of the Rh